
CHAPTER 7

URBAN OPERATIONS

Throughout history, military planners have viewed cities as centers of gravity and sources of national strength. Cities are population centers; transportation and communication hubs; key nodes of industrial, financial, and information systems; seats of government; and repositories of wealth. Because of the changing nature of society and warfare, deployments into urban environments have become more frequent, and this trend is likely to continue. The purpose of such deployments will be to neutralize or stabilize extremely volatile political situations, to defeat an enemy force that has sought protection afforded by urban terrain, or to provide assistance to allies in need of support. This chapter provides guidance necessary for planning and executing missions in an urban environment. The infantry brigade is the primary headquarters around which units are task organized to perform UO.

Section I. INTRODUCTION

Urban operations (UO) are defined as military operations conducted in a topographical complex and adjacent natural terrain where manmade construction and high population density are the dominant features. An urban area is a topographical complex where manmade construction and the population are the dominant features. Urban terrain confronts commanders with a combination of difficulties rarely found in other environments. Cities vary immensely depending on their history, the cultures of their inhabitants, their economic development, the local climate, available building materials, and many other factors. This variety exists not only among different cities but also within any particular urban area. The urban environment, like all environments, is neutral and affects all sides equally. The side that can best understand and exploit the effects of the urban area has the best chance of success.

7-1. GENERAL CONSIDERATIONS OF URBAN OPERATIONS

The increasing world population and accelerated growth of cities makes UO in future conflicts very likely. Operations in urban areas usually occur when--

- The battalion task force is assigned an objective that is within an urban area.
- The urban area is key (or decisive) in setting or shaping the conditions for current or future operations.
- The urban area is in the path of a general advance and cannot be surrounded or bypassed.
- Political or humanitarian concerns require the control of an urban area or necessitate operations within it.
- Defending from urban areas supports a more effective overall defense or cannot be avoided.
- Occupation, seizure, and control of the urban area will deny the enemy control of the urban area and the ability to impose its influence on both friendly military forces and the local civilian population, thereby allowing friendly forces to retain the initiative and dictate the conditions for future operations.

a. **Organization.** While it is imperative for tanks and infantry to work closely together in urban terrain, a mechanized infantry-heavy battalion task force is better suited for urban operations because of the numerous infantry-specific tasks associated with conducting operations in urban terrain.

b. **Digitized Task Forces.** Digitized battalion task forces derive considerable advantages from their ABCS equipment. While the MCS and FBCB2 do not depict the multiple levels of urban fighting and do not show precise detail in built-up area (BUA) mapping, their ability to transfer information quickly and to maintain current information throughout the TF still represents a notable improvement over analog systems. When linked to a dismounted FBCB2, ABCS greatly enhances the combat effectiveness of Army combined arms teams and task forces in UO.

7-2. ARMOR AND MECHANIZED FORCES ROLE IN URBAN OPERATIONS

Although the close combat phase of urban operations is infantry-centric, armor and mechanized units operate as an integral force in urban operations. Armor and mechanized units are the optimal force to isolate or prevent isolation during urban operations. Secondly, armor and mechanized forces operate with infantry forces in the close fight by providing precise and overwhelming firepower and the ability to maneuver to gain a positional advantage over the enemy.

a. **Isolation.** As part of brigade shaping operations, isolation is defined as a tactical task to seal off an enemy from his sources of support, to deny freedom of movement, and prevent an enemy from having contact with other forces. Mechanized forces are well suited to execute this task because they possess the speed, firepower, and protection necessary to shape the urban area for offensive and defensive operations. If the attacker fails to isolate the urban area, the defender can reinforce and resupply his forces thus protracting the operation and significantly decreasing the attacker's resources and his will to continue. If the defender allows himself to be isolated, the attacker seizes the initiative and forces the defender to take risky actions (such as a breakout or counterattack) to survive.

b. **Close Combat.** Historically, the close fight in urban combat has consisted of street-to-street fighting resulting in high casualties and high expenditure of resources. Combined-arms forces use maneuver and situational understanding to position forces to accomplish their assigned missions in urban environments.

7-3. TACTICAL CHALLENGES

The battalion task force faces a number of challenges during the planning and execution of UO. The most likely challenges are discussed in the following paragraphs.

a. **Contiguous and Noncontiguous Areas of Operations.** The TF must be prepared to conduct UO operations in both contiguous and noncontiguous areas of operations.

(1) Contiguous operations are military operations that the TF conducts in an area of operations that facilitates mutual support of combat, CS, and CSS elements. Contiguous operations have traditional linear features including identifiable, contiguous frontages and shared boundaries between forces. For TFs, contiguous operations are characterized by relatively close distances among adjacent TFs, supporting brigade assets, and subordinate units and elements.

(2) In noncontiguous operations, the TF may be required to operate independently, removed from brigade CS and CSS assets by distance and time. Additionally, subordinate company teams may operate in isolated pockets, connected only through the integrating effects of an effective concept of operations. Noncontiguous operations place a premium on initiative, effective information operations, decentralized security operations, and innovative logistics measures. Noncontiguous operations complicate or hinder mutual support of combat, CS, and CSS elements because of extended distances between subordinate units and elements.

b. **Symmetrical and Asymmetrical Threats.** In addition to being required to face symmetrical threats, the TF must be prepared to face threats of an asymmetrical nature.

(1) Symmetrical threats are generally “linear” in nature and include those threats that specifically confront the TF’s combat power and capabilities. Examples of symmetrical threats include conventional enemy forces conducting offensive or defensive operations against friendly forces.

(2) Asymmetrical threats are those that are specifically designed to avoid confrontation with the TF’s combat power and capabilities. These threats may use the civilian population and infrastructure to shield their capabilities from TF fires. Asymmetrical threats may attack both the TF and civilian population with WMD. Asymmetrical threats are most likely to target and be based in urban areas to take advantage of the density of civilian population and infrastructure. Examples of asymmetrical threats include terrorist attacks, electronic warfare (to include computer-based systems), criminal activity, guerrilla warfare, and environmental attacks.

c. **Quick Transition from Stability or Support Operations to Combat Operations and Back.** Stability and, to a lesser extent, support operations are missions that may transition to combat. The TF must always retain the ability to conduct offensive and defensive operations. Preserving the ability to transition allows the TF to maintain initiative while providing force protection. Commanders should consider planning a defensive contingency with on-order offensive missions in case stability and support operations deteriorate. Subordinate commanders and leaders must be fully trained to recognize activities that would initiate this transition.

d. **Rules of Engagement.** Urban operations are usually conducted against enemy forces fighting in close proximity to civilians. Rules of engagement and other restrictions on the use of combat power are more restrictive than in other conditions of combat (see FM 3-06.11).

Section II. MISSION, ENEMY, TERRAIN AND WEATHER, TROOPS AND SUPPORT AVAILABLE, TIME AVAILABLE, AND CIVIL CONSIDERATIONS (METT-TC)

Planning and preparation for UO are generally the same as for operations on open terrain; however, IPB is disproportionately important due to the complexity of urban terrain. In order for the commander and staff to develop an effective COA, the force must conduct aggressive ISR operations. Urban operations require significant human intelligence (HUMINT) reconnaissance because sensors and other technological devices are not as effective in urban environments. ISR operations can take the form of stealthy surveillance teams, tactical questioning of noncombatants, and reconnaissance of key terrain and avenues of approach. Using ISR assets and satellite imagery, the staff can develop urban

maps that include a common reference system (such as numbering buildings) to assist subordinate units' C2. The commander and staff must also take into account special considerations when operating in this environment. This section provides special METT-TC considerations for UO.

7-4. MISSION

The TF must close with and defeat the enemy in order to be decisive in urban operations. Close combat in urban operations is resource intensive, requires properly trained and equipped forces, and has the potential for high casualties. Therefore, the TF must use close combat as its decisive operation only after shaping the urban area through aggressive ISR, isolation, precision fires, and maneuver.

a. **Objective.** The commander and staff must clearly understand the purpose of the operation. The TF's objective may be terrain- or force-oriented. The commander must consider whether committing his force to combat in urban areas is required or beneficial for achieving his intent.

b. **Intent.** During planning for offensive operations, the commander and staff must consider the overall purpose and intent of the operation and define what is required. For example, the commander must determine if clearing means every building, block by block, or seizure of a key objective which may require clearing only along the axis of advance. Often, the TF can integrate urban areas into the defensive scheme to develop a stronger defense.

7-5. ENEMY

The TF commander and staff must consider the strength, composition, disposition, and activities of the enemy. They must consider both conventional and unconventional enemy forces and the tactics the enemy may employ. Enemy tactics may range from ambushes and snipers to large-scale conventional actions conducted by heavy forces. The IPB must address the known and potential tactics and vulnerabilities of all enemy forces and threats operating within and outside the urban area. The IPB must consider the three-dimensional environment of urban areas: airspace, surface, and subsurface. It should also consider the political, racial, ethnic, tribal, and religious factors that influence the enemy. (See FM 34-130 for a detailed discussion of urban IPB.)

a. The increasing availability of sophisticated technology has created unorthodox operational approaches that can be exploited by potential opponents. These approaches seek to counter the technological and numerical advantages of US joint systems and forces and to exploit constraints placed on US forces due to cultural bias, media presence, ROE, and distance from the crisis location.

b. Offsetting their inherent weaknesses, enemy forces seek an advantage in urban terrain to remain dispersed and decentralized, adapting their tactics to provide them the best success in countering a US response. Threats, in addition to conventional forces, may consist of--

- Unconventional forces.
- Paramilitary forces.
- Militia and special police organizations.
- Organized crime organizations.

c. These forces range from units equipped with small arms, mortars, machine guns, antiarmor weapons, and mines to very capable mechanized and armor forces equipped with current generation equipment. Urban environments also provide many passive dangers such as disease from unsanitary conditions and psychological illnesses. While the active threats vary widely, many techniques are common to all. The enemy may employ a series of threat tactics during urban operations (Figure 7-1).



Figure 7-1. Enemy threat tactics.

(1) ***Use the Population to Advantage.*** The populace of a given urban area represents key terrain; the side that manages it best has a distinct advantage. Future urban battles may see large segments of the populace remain in place. TFs involved in urban operations must conduct missions in and among the residents of the area.

(a) Enemy forces may use the population to provide camouflage, concealment, and deception for their operations. Guerrilla and terrorist elements may look no different from any other members of the community. Even conventional and paramilitary troops may have a “civilian” look. Western military forces adopted the clean-shaven, close-cut hair standard at the end of the nineteenth century to combat disease and infection, but twenty-first century opponents might very well sport beards as well as civilian-looking clothing and other “nonmilitary” characteristics.

(b) The civilian population may also provide cover for enemy forces, enhancing their mobility close to friendly positions. Enemy forces may take advantage of US moral responsibilities and attempt to make the civilian population a burden on the Army’s

logistical and force protection resources. They may herd refugees into friendly-controlled sectors, steal from US-paid local nationals, and hide among civilians during offensive operations.

(c) The civilian population may also serve as an important intelligence source for the enemy. Enemy forces may manipulate local hires serving among US soldiers, civilians with access to base camp perimeters, and refugees moving through friendly-controlled sectors to provide information on friendly dispositions, readiness, and intent. In addition, enemy special purpose forces and hostile intelligence service assets may move among well-placed civilian groups.

(2) ***Win the Information War.*** Enemy forces may try to win the information war in direct opposition to the TF's operations.

(a) Portable video cameras, Internet access, commercial radios, and cellular telephones are all tools that permit enemy forces to tell their story. American "atrocities" may be staged and broadcast. Electronic mail may be transmitted to sympathetic groups to help undermine resolve. Internet websites provide easy worldwide dissemination of enemy propaganda and misinformation. Hackers may gain access to US sites to manipulate information to the enemy's advantage.

(b) The enemy may make skillful use of the news media. Insurgent campaigns, for example, need not be tactical military successes; they need only make the opposition's campaign appear unpalatable to gain domestic and world support. The media coverage of the Tet Offensive of 1968 affected the will of both the American people and their political leadership. Although the battle for Hue was a tactical victory for the US, the North Vietnamese clearly achieved strategic success by searing the American consciousness with the high costs of urban warfare.

(3) ***Manipulate Key Facilities.*** Enemy forces may identify and quickly seize control of critical components of the urban area to help them shape the battlespace to their own ends. Telephone exchanges provide simple and reliable communications that can be easily secured with off-the-shelf technologies. Sewage treatment plants and flood control machinery can be used to implement WMD strategies or to make sections of the urban area uninhabitable. Media stations significantly improve the information operations of the controlling force. Power generation and transmission sites provide a means to control significant aspects of civilian society over a large area.

(4) ***Use the Three Dimensions of Urban Terrain.*** The enemy thinks and operates throughout all dimensions of the urban environment. Upper floors and roofs provide the urban enemy forces excellent observation points and battle positions above the maximum elevation of many weapons. Shots from upper floors strike friendly armored vehicles in vulnerable points. Basements also provide firing points below many weapons' minimum depressions and strike at weaker armor. Sewers and subways provide covered and concealed access throughout the area of operations. Conventional lateral boundaries often do not apply as enemy forces control some stories of a building while friendly forces control other stories of the same building.

(5) ***Employ Urban-Oriented Weapons.*** Whether they are purpose-built or adapted, many weapons may have greater than normal utility in an urban environment while others may have significant disadvantages. Urban enemy weapons are much like the nature of urbanization and the urban environment: inventive and varied. Small, man-

portable weapons, along with improvised munitions, can dominate the urban environment. Examples of enemy weapons favored in UO are--

- Weapons with no minimum depression or no maximum elevation.
- Weapons with little or no backblast (gas-metered, soft launch, and so on).
- Mortars.
- Sniper rifles.
- Machine guns.
- Grenades.
- Grenade launchers.
- Flame and incendiary weapons.
- Rocket-propelled grenades (RPGs) and other shoulder-fired antitank guided missiles (ATGMs).
- Riot control and tranquilizer gases.
- Mines and booby-traps.

(6) ***Engage the Entire Enemy Force.*** Enemy forces may “hug” TFs operating in an urban area to avoid the effects of high-firepower standoff weapons systems. They may also try to keep all or significant portions of the TF engaged in continuous operations to increase the TF's susceptibility to stress-induced illnesses. UO, by their nature, produce an inordinate amount of combat stress casualties, and continuous operations exacerbate this problem. The enemy may maintain a large reserve to minimize the impact of this on its own forces.

(7) ***Focus Attacks on Service Support and Unprotected Soldiers.*** Enemy forces may prey on soldiers poorly trained in basic infantry skills. Ambushes may focus on these soldiers while they are conducting resupply operations or moving in poorly guarded convoys. Urban operations are characterized by the isolation of small groups and navigational challenges, and the enemy may use the separation this creates to inflict maximum casualties even when there is no other direct military benefit from the action.

7-6. URBAN MAPPING

Prior to entering an urban environment, the battalion task force obtains or develops urban maps to assist in C2. The brigade should attempt to gain access to city planner or civil engineer maps to provide detailed information on the urban area. The urban maps, whether digital or sketched, include a reference system to identify buildings and streets (Figure 7-2, page 7-8). Naming conventions should be simple to allow for ease of navigation and orientation in the urban environment (odd number buildings on left side of street, even numbers on right side). Street names should not be used as references because the enemy can remove or change street signs to confuse friendly forces.

a. Initial map and aerial photograph reconnaissance can identify key terrain and other important locations in the AO. These include--

(1) ***Safe Havens.***

- Hospitals.
- Police stations.
- Embassies.
- Other (friendly) facilities.

(2) *Hazardous Areas.*

- Construction sites.
- Dangerous intersections.
- Bridges.
- Areas of high crime.

(3) *Major Terrain Features.*

- Parks.
- Industrial complexes.
- Airports.

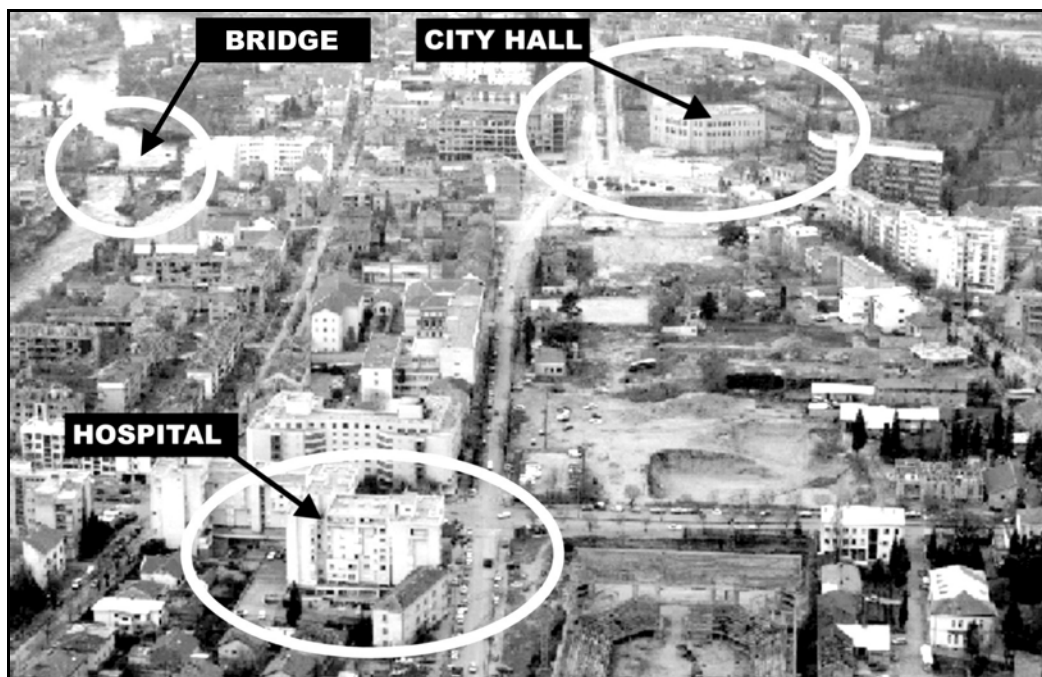


Figure 7-2. Initial photo reconnaissance of urban area of operations.

b. The urban map also facilitates control by tracking units with greater detail and obtaining precise location updates when digital systems (which produce the common operating picture) may be affected by urban terrain. The TF uses ISR assets to confirm and update its urban maps. These improved maps are critical since most existing maps do not provide the level of detail necessary to conduct tactical operations. Specifically, the brigade assesses avenues of approach in the urban AO. Included with the maps are overlays that categorize sections of the urban area by ethnicity, religious affiliation, and other prevailing characteristics that could affect operations (Figure 7-3; Figure 7-4, page 7-10; and Figure 7-5, page 7-11).

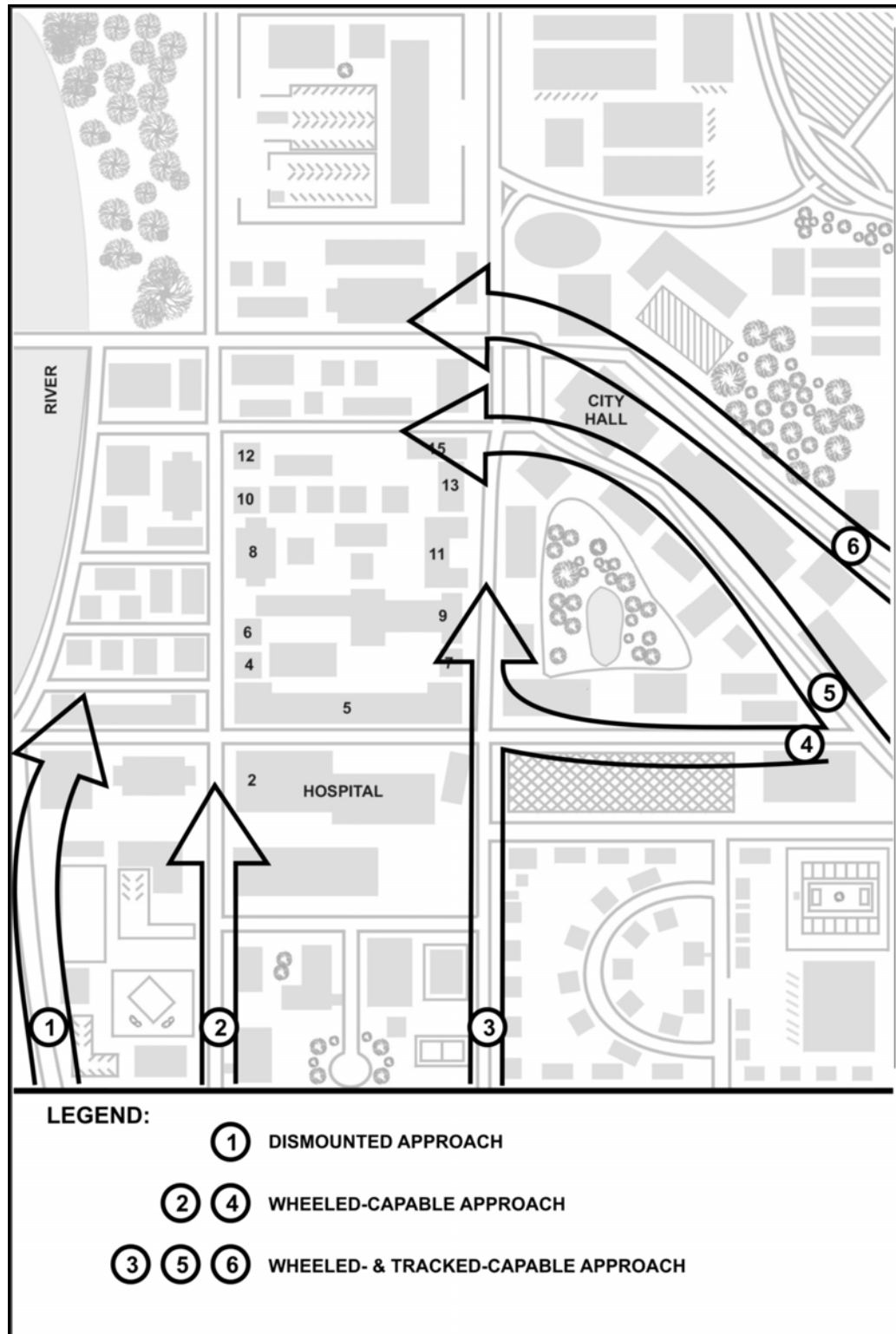


Figure 7-3. Avenues of approach in the urban area.

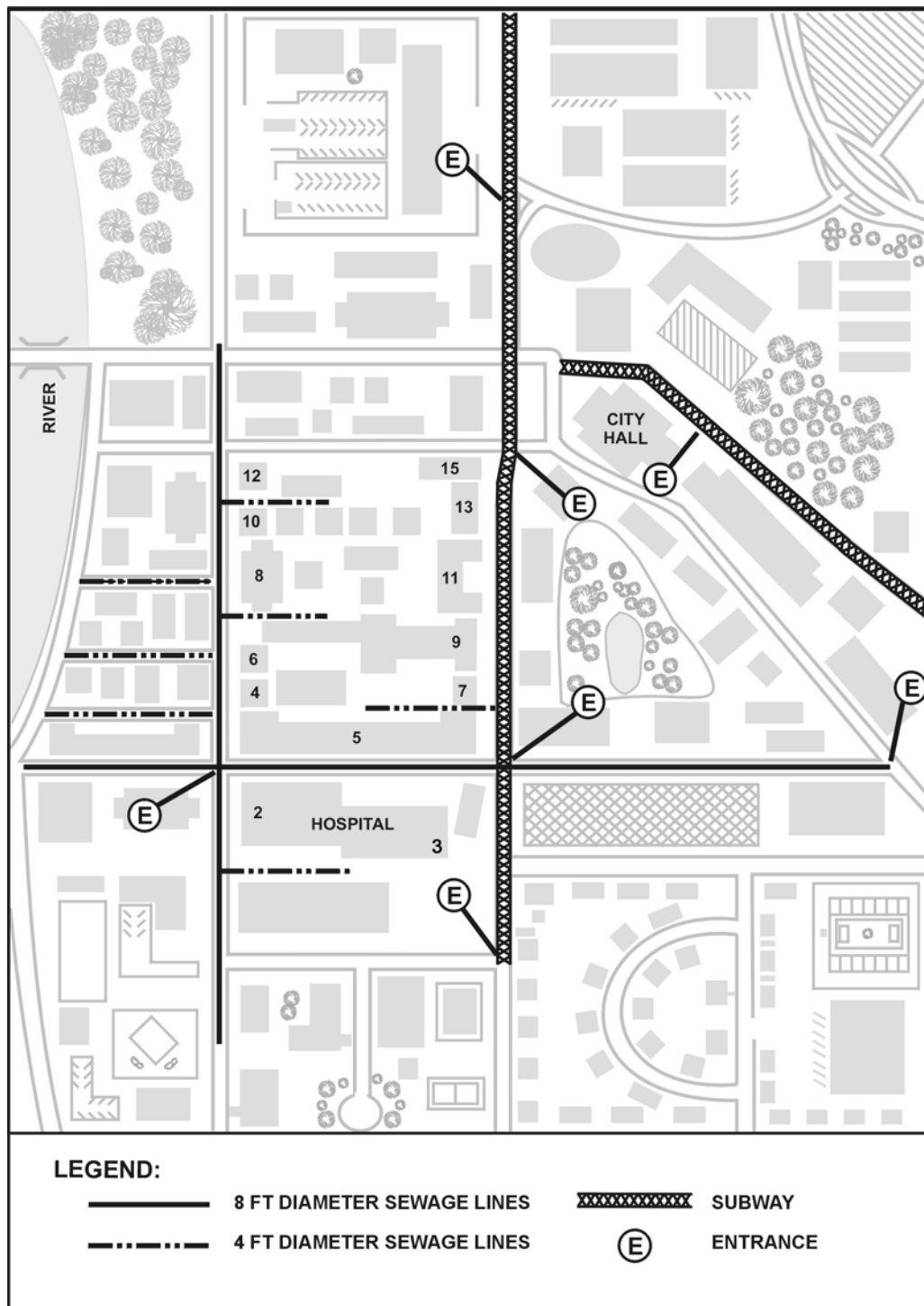


Figure 7-4. Sewer and subterranean overlay.

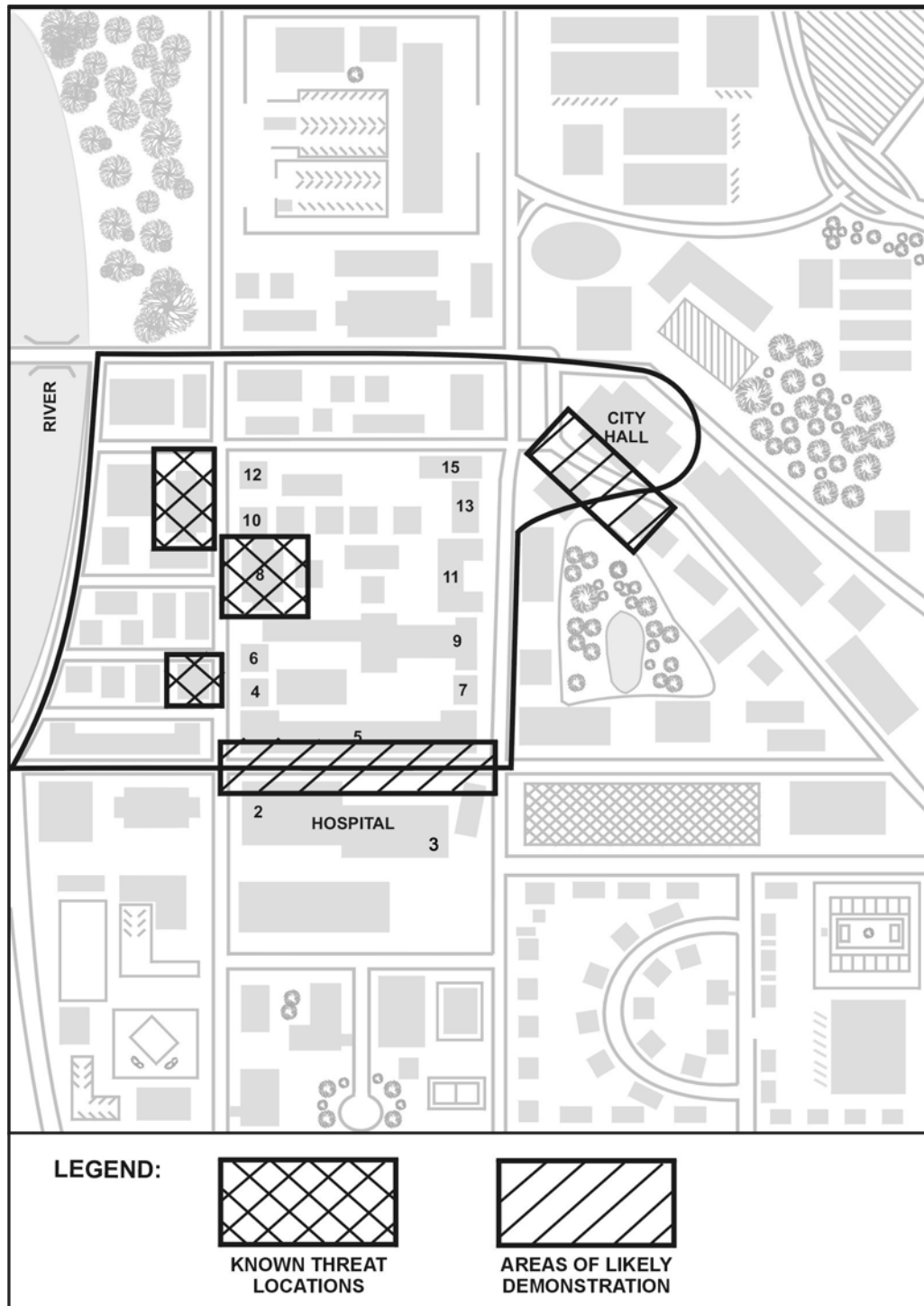


Figure 7-5. Enemy overlay.

7-7. TERRAIN AND WEATHER

An urban area is a concentration of structures, facilities, and people that form the economic and cultural focus for the surrounding area. TF operations are affected by all categories of urban areas (Table 7-1, page 7-12). Cities, metropolises, and megalopolises with associated urban sprawl cover hundreds of square kilometers. TFs normally operate

in these urban areas as part of a larger force. Extensive combat in these urban areas involves units of division level and above.

Villages (Population of 3,000 inhabitants or less)	The TF's AO may contain many villages. TFs and company teams bypass, move through, defend from, and attack objectives within villages as a normal part of brigade operations.
Towns (Population over 3000 up to 100,000 inhabitants)	Operations in such areas normally involve brigades or divisions. TFs may bypass, move through, defend in, or attack enemy forces in towns as part of division operations. Operations in these areas normally require the full commitment of brigades or divisions.
Cities (Population of 100,000 to 1 million inhabitants)	Extensive combat in large cities involves divisions and larger formations. TFs may fight adjacent to, on the edges of, or inside cities.
Metropolis (Population over 1 million to 10 million)	Extensive combat in large cities involves divisions and larger formations. TFs may fight adjacent to, on the edges of, or inside cities.
Megalopolis (Population over 10 million inhabitants)	Extensive combat in large cities involves divisions and larger formations. TFs may fight adjacent to, on the edges of, or inside cities.

Table 7-1. Categories of urban areas.

a. **Terrain.** A detailed analysis of the urban area and surrounding terrain is vital to the success of any operation in an urban area (see FM 34-1). The TF commander must understand the elements of the urban infrastructure that are necessary for achieving the intent and end state of the brigade's mission. Military maps normally do not provide sufficient detail for terrain analysis of an urban area. Recent aerial photographs and other current intelligence products are critical. Maps and diagrams of the city from other sources, such as local governments, tourist activities, or law enforcement services, can be useful. Products developed by the National Imagery Mapping Agency (NIMA) can be specifically tailored for the area of operations.

(1) The S2 should obtain maps and diagrams of the following:

- Subway systems, railways, and mass transit routes.
- Underground water, sewer, and utility systems.
- Electrical distribution systems, power stations, and emergency services.
- Fuel supply and storage facilities.
- Facilities for mass communications, such as cellular phones, computer hubs, radios, and telephones.
- Public administration buildings, hospitals, and clinics.

(2) The terrain analysis should also identify the following:

- Structural characteristics of buildings, bridges, and transportation networks.
- Roads, highways, rivers, streams, and other waterways that may be used as high-speed avenues of approach.
- Analysis of the natural terrain surrounding the urban area (observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach [OCOKA]).
- Analysis of the urban area itself to include street patterns, structure types, and available maneuver space. (See FM 34-130.)
- Covered and concealed approaches to the urban area.
- Key and decisive terrain inside and outside the urban area.
- Identification of buildings, areas, or facilities protected by the law of land warfare or restricted by current ROE (such as churches, medical facilities, historic monuments, and other facilities dedicated to arts and sciences), provided they are not being used for military purposes. (See FM 27-10.)
- Stadiums, parks, open fields, playgrounds, and other open areas that may be used for landing zones or holding areas.
- Locations of prisons and jails.
- Potential host nation support facilities such as quarries, lumber yards, major building supply companies, and warehouses.
- Power lines, telephone lines, and raised cables that may be hazards to helicopters.
- Significant fire hazards and locations of toxic industrial materials (TIM).
- Weather effect products from topographic models or historical sources (for example, effects of heavy rains on local areas).

(3) A close relationship with the local government and military forces can be very beneficial. They can provide information about population, fire-fighting capabilities, locations of TIM, police and security capabilities, civilian evacuation plans, location of key facilities, and, possibly, current enemy activities. They may also be able to provide translators.

(4) An infrastructure analysis of the urban area is also important. Because urban infrastructures vary greatly, a comprehensive list cannot be provided. However, common characteristics include--

- Urban street patterns and trafficability.
- Sources of potable water.
- Bulk fuel and transport systems.
- Communications systems.
- Rail networks, airfields, canals and waterways, and other transportation systems.
- Industries.
- Power (to include nuclear) and chemical production facilities and public utilities.

b. **Weather.** Weather analyses that are important to TF operations include visibility, winds, precipitation, and temperature and humidity.

(1) **Visibility.** Light data have special significance during urban operations. Night and periods of reduced visibility (including fog) favor surprise, infiltration, detailed reconnaissance, attacks across open areas, seizure of defended strongpoints, and reduction of defended obstacles. However, the difficulties of night navigation in restricted terrain, without reference points and near the enemy, forces the TF to rely on simple maneuver plans with easily recognizable objectives.

(2) **Winds.** Wind chill is not as pronounced in urban areas. However, the configuration of streets, especially in close-orderly block and high-rise areas, can cause wind canalization. This increases the effects of the wind on streets that parallel the wind direction while cross-streets remain relatively well protected. Because of these factors, swirling winds occur and the wind speed and direction may continually change. This factor also affects the use of smoke for both friendly and enemy forces. Downwind predictions for NBC and TIM are also difficult.

(3) **Precipitation.** Rain or melting snow often floods basements and subterranean areas, such as subways, and also makes storm and other sewer systems hazardous or impassable. Chemical agents and other TIM are washed into underground systems by precipitation. As a result, these systems may contain toxic concentrations much higher than surface areas and may become contaminated “hot spots.” These effects become more pronounced as chemical agents or TIM are absorbed by brick or unsealed concrete sewer walls.

(4) **Temperature and Humidity.** Air inversion layers are common over cities, especially cities located in low-lying “bowls” or in river valleys. Inversion layers trap dust, chemical agents, and other pollutants, reducing visibility and often creating a greenhouse effect which causes a rise in ground and air temperature. The heating of buildings during the winter and the reflection and absorption of summer heat make urban areas warmer than surrounding open areas during both summer and winter. This difference can be as great as 10 to 20 degrees and can add to the already high logistics requirements of urban combat. Summer heat, combined with the very physical requirements of urban combat, can cause severe heat-related injuries. Changes in temperature as a result of air inversions can also affect thermal sights during crossover periods of warm to cold and vice versa.

7-8. TROOPS

During UO, the TF is often augmented with additional assets, which may include engineers, ADA, and light infantry. Army aviation, FA, MP, public affairs, PSYOP, civilian affairs, smoke, decontamination, and long-range surveillance (LRS) assets, when available, may also support the TF under brigade control. (Figure 7-6, page 7-18, shows a sample task organization.) Actual task organizations depend on the factors of METT-TC.

a. **Troop Density, Equipment, and Ammunition.** Troop density for offensive missions in urban areas can be as much as three to five times greater than for similar missions in open terrain. Troops require additional equipment such as ladders, ropes, grappling hooks, and other entry equipment. The ammunition consumption rates for small arms, grenades (all types), Claymore mines, ATGMs, 25-mm and 120-mm high-explosive (HE), and explosives can be four times the normal rate. The staff must ensure the continuous supply of Classes I, III, V, and VIII and water to forward units. Supplies

should be configured for immediate use and delivered as far forward as possible to supported units.

b. **Stress.** The commander and staff must consider the effects of prolonged combat on soldiers. The battalion surgeon must ensure that he participates in the early planning for operations in the urban area. To develop a comprehensive, effective, and synchronized HSS plan, the battalion surgeon must know and understand the battalion commander's intent and guidance. Further, the battalion surgeon and the medical platoon personnel must be included in the combined arms rehearsal to ensure the HSS plan is synchronized with the tactical plan. See FM 4-02.4 for information on HSS support in urban operations. Continuous close combat produces high psychological stress and physical fatigue. Rotating units committed to combat for long periods can reduce stress. Leaders should take extra effort and time to train and psychologically prepare soldiers for this type of combat.

c. **Discipline.** Maintaining discipline is especially important in UO. All commanders must ensure their soldiers understand and follow the established ROE. The law of land warfare prohibits unnecessary injury to noncombatants and needless damage to property. This may restrict the commander's use of certain weapons, munitions, and tactics.

7-9. TIME

Combat in urban areas has a slower tempo and increased use of methodical, synchronized missions. In planning UO, the commander and staff must take these factors into account. Planning must allow more time for thorough reconnaissance, subordinate unit rehearsals, sniper and countersniper operations, demolitions, breaching, fire fighting, entry and movement techniques, fighting position construction, booby trap recognition and neutralization, combat lifesaver training, and crowd control.

7-10. CIVIL CONSIDERATIONS

The commander and staff must understand the composition, activities, and attitudes of the civilian population within the urban area to include the political infrastructure. Various options are available to the commander to control the impact of civilians on the operation. These include screening civilians, prohibiting unauthorized movement, diverting or controlling refugee movements, and evacuating. Understanding the urban society requires comprehension of--

- Living conditions.
- Cultural distinctions.
- Ethnicity.
- Factions.
- Religious beliefs.
- Political affiliation
- Grievances.
- Attitudes toward US forces (friendly, hostile, or neutral).

a. **Curfew and Evacuation.** A commander with the mission of defending an urban area may need to establish a curfew to maintain security or to aid in control of military traffic. (Curfews are not imposed as punishment. They are normally established to reduce noncombatant casualties and provide a measure of force protection.) A commander can require civilians to evacuate towns or buildings if the purpose of the evacuation is to use

the town or building for imperative military purposes, to enhance security, or to safeguard those civilians being evacuated. If the commander takes this action, he must specify and safeguard the evacuation routes. TFs may also be involved in securing routes and possibly safeguarding food, clothing, and medical and sanitary facilities. Evacuated civilians must be transferred back to their homes as soon as hostilities in the area have ceased. The staff must plan for and coordinate the movement and evacuation of civilians to ensure their actions do not interfere with the military operation. The TF staff and supporting civil affairs units working with local officials coordinate the movements of civilians.

b. **Resistance Groups.** The TF may encounter civilian resistance groups whose actions may range from providing the enemy with supplies, services, and noncombatant support to actively fighting against friendly forces. Members of such resistance groups should be dealt with in accordance with applicable provisions of the law of war. Commanders should seek guidance from the judge advocate general (JAG) concerning the detention and disposition of persons participating in acts harmful to friendly forces. The S2 must work with PSYOP and civil affairs units to identify these threats and recommend, within the ROE, the appropriate preemptive action or response. The activities of resistance groups may also benefit friendly forces. They may provide HUMINT; act as guides, liaisons, or translators; and provide subject-matter expertise on local public facilities such as refineries, power plants, and water works. They may also provide active resistance against the enemy.

Section III. CONTROLLING OPERATIONS

Urban operations require centralized planning and decentralized execution. Therefore, the staff must develop a detailed plan that synchronizes the battlefield operating systems in order to meet the commander's intent and provide subordinate units with the means to accomplish the mission.

7-11. ENEMY FOCUS

During the mission analysis, the plan should focus on the factors of METT-TC. Orient the plan on the enemy rather than the terrain. Use terrain factors to defeat the enemy. Considerations include, but are not limited to, the following:

- a. Thorough evaluation of the urban area's related terrain and enemy may take much longer than in other environments. This time factor also affects friendly planning efforts.
- b. Determine the enemy's location, strength, and capabilities. Develop a plan that defeats his direct and indirect fire systems.
- c. Focus the axis of advance on the enemy's weaknesses while maintaining adequate force protection measures. When possible, employ multiple and supporting axes of advance.
- d. Divide the objective area into manageable smaller areas that facilitate company team maneuver.
- e. Isolate the objective area and establish a foothold at the point of entry. The location chosen for the foothold must allow for expansion.
- f. The brigade and TF maneuver plans directly affect the company team schemes of maneuver. Every platoon within the TF must know what enemy targets will be engaged by brigade and TF assets.

7-12. COMMANDER'S CRITICAL INFORMATION REQUIREMENTS

The CCIR directly affect a commander's decisions and dictate the successful execution of tactical operations. The TF staff must develop the components of the CCIR that facilitate the commander's ability to make decisions affecting the plan during urban operations. Essential elements of friendly information are not part of CCIR, although they become a commander's priorities when he states them. EEFI help commanders understand what enemy commanders want to know about friendly forces and why. They tell the commander what cannot be compromised. Friendly forces information requirements (FFIR) are information that the commander and staff need about the forces available for the operation. The following are examples of PIR, EEFI, and FFIR that would help the commander in an urban environment.

a. **Priority Information Requirements.** PIR are intelligence requirements that a commander has anticipated and that have stated priority in task planning and decision making. Examples include the following:

- Is the enemy using avenue of approach one to infiltrate into the TF area of operations?
- Does mobility corridor three (Third Street) restrict movement of friendly armored and wheeled vehicles?
- Is there an enemy strongpoint located between Third Street and Fifth Street along Third Avenue?
- Does the enemy have ADA assets positioned along air avenue of approach two?

b. **Essential Elements of Friendly Information.** EEFI are critical aspects of a friendly operation that, if known by the enemy, would subsequently compromise, lead to failure, or limit the success of the operation. Therefore, they must be protected from detection. Examples include the following:

- Have any of the TF command nets been compromised?
- Has the LOC been disrupted and if so, where?
- Has the enemy located my Q36?

c. **Friendly Forces Information Requirements.** FFIR are information the commander and staff need about the friendly forces available for the operation. Examples include the following:

- Scouts captured or compromised.
- Main bridge locations along the ground route that have been blown.
- OPORD compromised.
- Loss of cryptographic equipment.
- Expected personnel and equipment replacements that did not arrive.

7-13. TASK-ORGANIZATION OF UNITS TO ACCOMPLISH SPECIFIC TASKS

Urban operations may require unique task organizations (Figure 7-6). For example, urban operations provide one of the few situations where infantry and armor elements may be effectively task organized below platoon levels. TF commanders must consider providing assets where they will be needed to accomplish specific tasks. All phases of mission execution must be considered when developing task organization. Changes in task organization may be required to accomplish different tasks during mission execution.

Figure 7-6 depicts a sample task organization for a mechanized infantry TF conducting offensive urban operations that consists of a main effort, two supporting efforts, and a reserve.

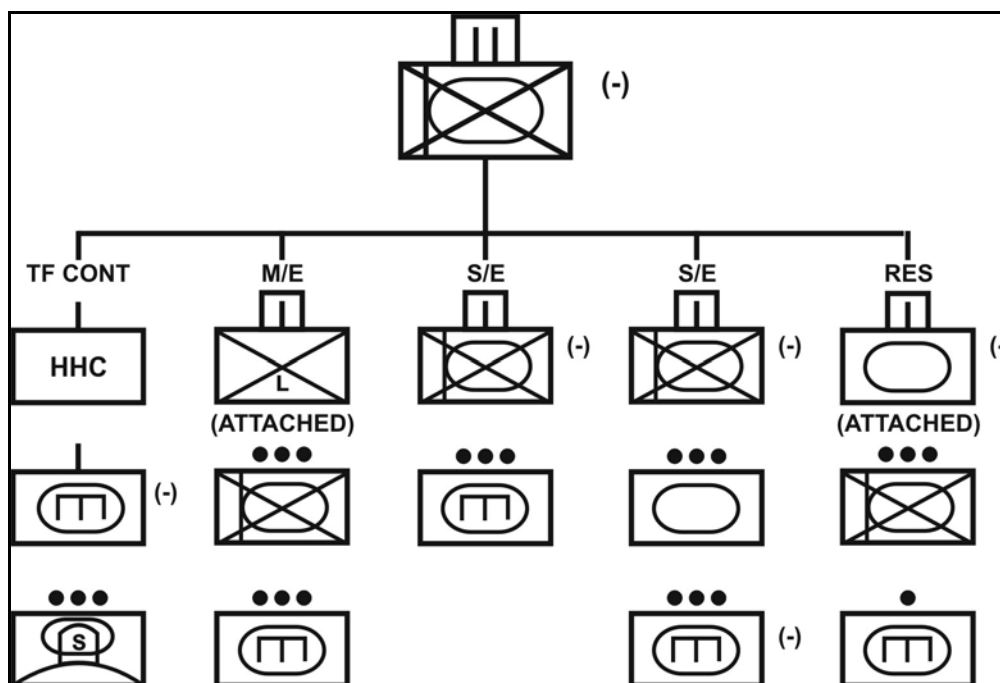


Figure 7-6. Sample offensive task organization.

NOTE: The task organization shown in Figure 7-6 may change after the assault when the TF reorganizes for follow-on missions.

7-14. REHEARSALS

After developing a thorough, well-synchronized plan, TF commanders should require subordinate units to conduct combined arms rehearsals at the levels at which the operations will occur, to include all phases of the operation. When conducted properly, combined arms rehearsals identify potential problems in synchronization among maneuver, combat support, and combat service support elements. Rehearsals provide a means for units that seldom operate together to train collective skills. Rehearsals should start early in the troop-leading process. Some rehearsals can start shortly after receipt of warning orders. Subordinate units can rehearse drills, such as breaching, clearing buildings, and moving between buildings, before receiving a detailed plan. Infantry can also rehearse aspects of operating close to armored vehicles. The TF commander and staff must allocate sufficient time to subordinate units to conduct rehearsals. Rehearsals for subordinate units to consider include, but are not limited to, the following:

- Communications procedures.
- Direct fire control plan.
- Fires (lethal and nonlethal effects).
- Breaching.
- Maneuver.

7-15. FIRE SUPPORT

Often, the role of fires in UO is to get the maneuver force into or around the urban area with minimal casualties so that the commander has the maximum combat power to close with the enemy and finish the fight. The fire support officer develops EFSTs to support the maneuver plan. The fire support officer may also plan and coordinate nonlethal capabilities for the TF commander. Civil affairs and PSYOP assets should be coordinated with the appropriate command and control warfare or information operations planning headquarters. When planning the use of mortars, commanders must consider the following. (See FM 3-06.11, Appendix K, for additional TTP.)

- FOs should be positioned where they can get the maximum observation so target acquisition and adjustments in fire can best be accomplished. This is not necessarily on tops of buildings.
- Commanders must understand ammunition effects to correctly estimate the number of volleys needed for the specific target coverage. Also, the effects of using white phosphorus (WP) or red phosphorus may create unwanted smoke screens or limited visibility conditions that could interfere with the tactical plan.
- FOs must be able to determine dead space in urban terrain. Dead space is the area in which indirect fires cannot reach the street level because of buildings. This area is a safe haven for the enemy. For mortars, the dead space is about one-half the height of the building (Figure 7-7).
- Mortar crews should plan to provide their own security.
- Commanders must give special consideration to where and when mortars are to displace while providing immediate indirect fires to support the overall tactical plan. Combat in urban areas adversely affects the ability of mortars to displace because of rubble and the close nature of urban combat.

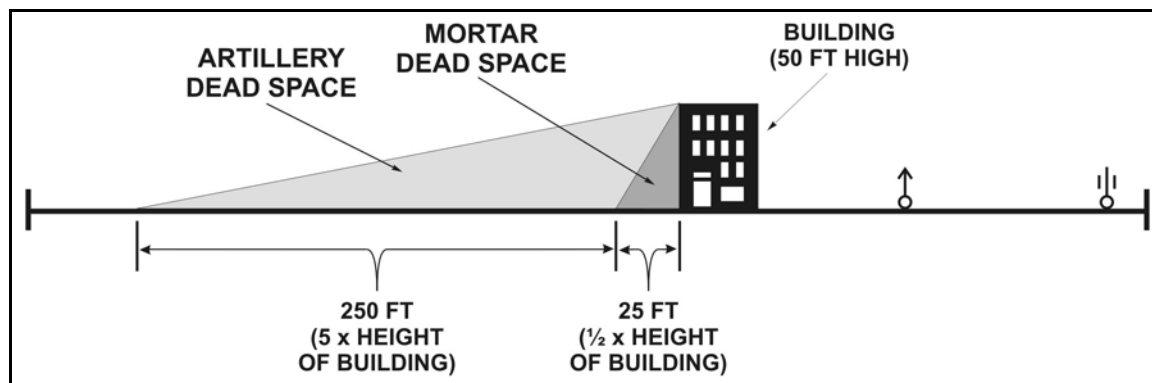


Figure 7-7. Dead space.

7-16. FIELD ARTILLERY

Appropriate fire support coordination measures are essential because fighting in urban areas results in opposing forces fighting in close combat. When planning for fire support in an urban area, the following should be considered.

a. Target acquisition may be more difficult because of the increased cover and concealment afforded by the terrain. Ground observation is limited in urban areas. Adjusting fires is difficult since buildings block the view of adjusting rounds; therefore, the lateral method of adjustment may be most useful.

b. Initial rounds are adjusted laterally until a round impacts on the street perpendicular to the FEBA. Airburst rounds are best for this adjustment. The adjustments must be made by sound. When rounds impact on the perpendicular street, they are adjusted for range. When the range is correct, a lateral shift is made onto the target, and the gunner fires for effect.

c. Special considerations apply to shell and fuze combinations when buildings limit effects of munitions:

- Careful use of variable time (VT) is required to avoid premature arming.
- Indirect fires may create unwanted rubble and collateral damage.
- The close proximity of enemy and friendly troops requires careful coordination.
- WP may create unwanted fires and smoke.
- Fuze delay should be used to penetrate fortifications.

- Illumination rounds can be effective; however, friendly positions should remain in shadows, and enemy positions should be highlighted. Tall buildings may mask the effects of illumination rounds.
- VT, time, and improved conventional munitions (ICM) are effective for clearing enemy positions, observers, and antennas from rooftops.
- Swirling winds may degrade smoke operations.
- Scatterable mines (SCATMINES) may be used to impede enemy movements. SCATMINE effectiveness is reduced when delivered on a hard surface.

d. Target acquisition is difficult in urban terrain because the enemy has many covered and concealed positions and movement lanes. The enemy may be on rooftops, in buildings, and in sewer and subway systems. Aerial observers are extremely valuable for targeting because they can see deep to detect movements, positions on rooftops, and fortifications. Targets should be planned on rooftops to clear away enemy FOs as well as communications and radar equipment. Targets should also be planned on major roads, at road intersections, and on known or likely enemy positions. Consider employing artillery in the direct fire mode to destroy fortifications, especially when assaulting well-prepared enemy positions. Also, restrictive fire support coordination measures, such as a restricted fire area or no-fire area, may be needed to protect civilians and critical installations.

e. Self-propelled 155-mm howitzers are effective in neutralizing concrete targets with direct fire. Concrete-piercing 155-mm rounds can penetrate 36 inches of concrete at ranges up to 2,200 meters. The mounted .50-caliber machine gun can also be used as direct fire support. Infantry must closely protect howitzers when used in the direct fire mode since they do not have any significant protection for their crews.

f. Forward observers must be able to determine where and how large the dead spaces are. This area is a safe haven for the enemy because he is protected from indirect fires. For low-angle artillery, the dead space is about five times the height of the building. For high-angle artillery, the dead space is about one half the height of the building (Figure 7-7, page 7-19.)

g. Aerial observers are effective for seeing behind buildings immediately to the front of friendly forces. They are extremely helpful when using the ladder method of adjustment because they may actually see the adjusting rounds impact behind buildings. Aerial observers can also relay calls for fire when communications are degraded due to power lines or masking by buildings.

h. Radar can locate many artillery and mortar targets in an urban environment because of the high percentage of high-angle fires. If radar is sited too close behind tall buildings, it loses some effectiveness.

- i. The use of airburst fires is an effective means of clearing snipers from rooftops.

7-17. MORTARS

Mortars are well suited for combat in urban areas because of their high rate of fire, steep angle of fall, and short minimum range. (See chapter 9, paragraph 9-17, for additional information.)

7-18. COMMUNICATIONS

One of the biggest challenges for a TF staff is to maintain communications with subordinate elements. Buildings and electrical power lines reduce the range of digital

communications and FM radios. Remoting radio sets or placing antennas on rooftops can solve the range problem for CPs and trains. Company teams do not have the assets to ensure continuous communications, so the TF staff must plan for continual movement of TF assets to support company team operations.

a. **Wire.** Wire is a secure and effective means of communications in urban areas. Wires should be laid underground, overhead on existing poles, or through buildings to prevent vehicles from cutting them.

b. **Messengers and Visual Signals.** Messengers and visual signals can also be used in urban areas. Messengers must plan routes that avoid the enemy. Routes and time schedules should be varied to avoid establishing a pattern. Visual signals must be planned so they can be seen from the buildings.

c. **Sound.** Sound signals are normally not effective in urban areas due to the amount of surrounding noise.

d. **Existing Systems.** If existing civilian or military communications facilities can be captured intact, they can also be used by the task force. An operable civilian phone system, for instance, can provide a reliable, although nonsecure, means of communication. Use of news media channels in the immediate area of operations for other-than-emergency communications must be coordinated through the S1 or civil affairs officer.

7-19. WEAPONS EFFECTS

The characteristics and nature of combat in urban areas affect the results and employment of weapons. Leaders at all levels must consider the following factors in various combinations.

a. **Surfaces.** Hard, smooth, flat surfaces are characteristic of urban targets. Rounds rarely impact perpendicular to these flat surfaces but rather at some angle of obliquity. This reduces the effect of a round and increases the threat of ricochets.

b. **Ranges and Engagement Time.** Engagement times are short, and ranges are close in urban areas. About 90 percent of all targets are located 50 meters or less from the identifying soldier. Minimum arming ranges and troop safety from backblast or fragmentation effects must be considered.

c. **Depression and Elevation Limits.** Depression and elevation limits for some weapons create dead space. Tall buildings form deep canyons that are often safe from indirect fires. Some weapons can fire rounds to ricochet behind cover and inflict casualties. Target engagement from horizontal and vertical oblique angles demands superior marksmanship skills.

d. **Obscuration.** Smoke from burning buildings, dust from explosions, shadows from tall buildings, and the lack of light penetrating inner rooms combine to reduce visibility and increase a sense of isolation. Added to this is the masking of fires caused by rubble and manmade structures. Targets, even those at close range, tend to be indistinct.

e. **Confusion.** Urban fighting often becomes a confused melee with several small units attacking on converging axes. The risks from friendly fires, ricochets, and fratricide must be considered during planning. Control measures must be continually adjusted to reduce the risks. Soldiers and leaders must maintain a sense of situational understanding and clearly mark their progress IAW unit SOP to avoid fratricide.

f. **Buildings.** Both the shooter and target may be inside or outside buildings. They may be inside the same building or in separate buildings. The enclosed nature of combat in urban areas means the weapon's effect, such as muzzle blast or backblast and penetration from room to room, must be considered as well as the round's impact on the target. Usually, manmade structures must be attacked before enemy personnel inside are attacked. Weapons and demolitions may be chosen for employment based on their effects against masonry and concrete rather than against enemy personnel.

Section IV. OFFENSIVE OPERATIONS

Military references addressing "modern experiences in city combat" as far back as 1942 discuss shock units or special assault teams being used by attackers (and often defenders) with great success. These assault teams are characterized by the integration of combined arms and typically contain infantry with variable combinations of armor, artillery, or engineers. The following passage illustrates combined-arms operations conducted in an urban combat environment during World War II:

The battalion plan of action was as follows: one platoon of Company "F," with a light machine gun section, would stage the initial diversionary attack. It would be supported by two tanks and two tank destroyers, who were instructed to shoot at all or any suspected targets. Observation posts had been manned on a slag pile to support the advance with 81-mm mortar fire...The platoon action was to be the first step...to reduce the town of Aachen.

...the remainder of our zone of action...would be cleared by Companies "F" and "G," who would execute a flanking attack, jumping off abreast of each other through the area secured by the Company "F" platoon...Preparatory fire by medium artillery was to be planned...Mortar observers would accompany each company...Tanks and tank destroyers were assigned to each company...

LTC Darrel M. Daniel
Commander, 2nd Bn, 26th Inf Regt
October, 1944, Battle of Aachen

7-20. OFFENSIVE FRAMEWORK

Figure 7-8 depicts the urban operational framework as it applies to offensive operations and shows the tactical tasks of subordinate units. While the elements of the operational framework are not phases, tactical tasks may become phases at the battalion level and below, based on the factors of METT-TC. Properly planned and executed offensive operations involve all tactical tasks shown. They may be conducted simultaneously or sequentially, depending on the factors of METT-TC. During offensive operations, the TF commander's intent normally includes--

- Synchronizing precision fires, information operations, and nonlethal capabilities.
- Isolating decisive points.
- Using superior combat power to destroy HPTs.
- Using close combat, when necessary, against decisive points.
- Transitioning quickly to stability or support operations.

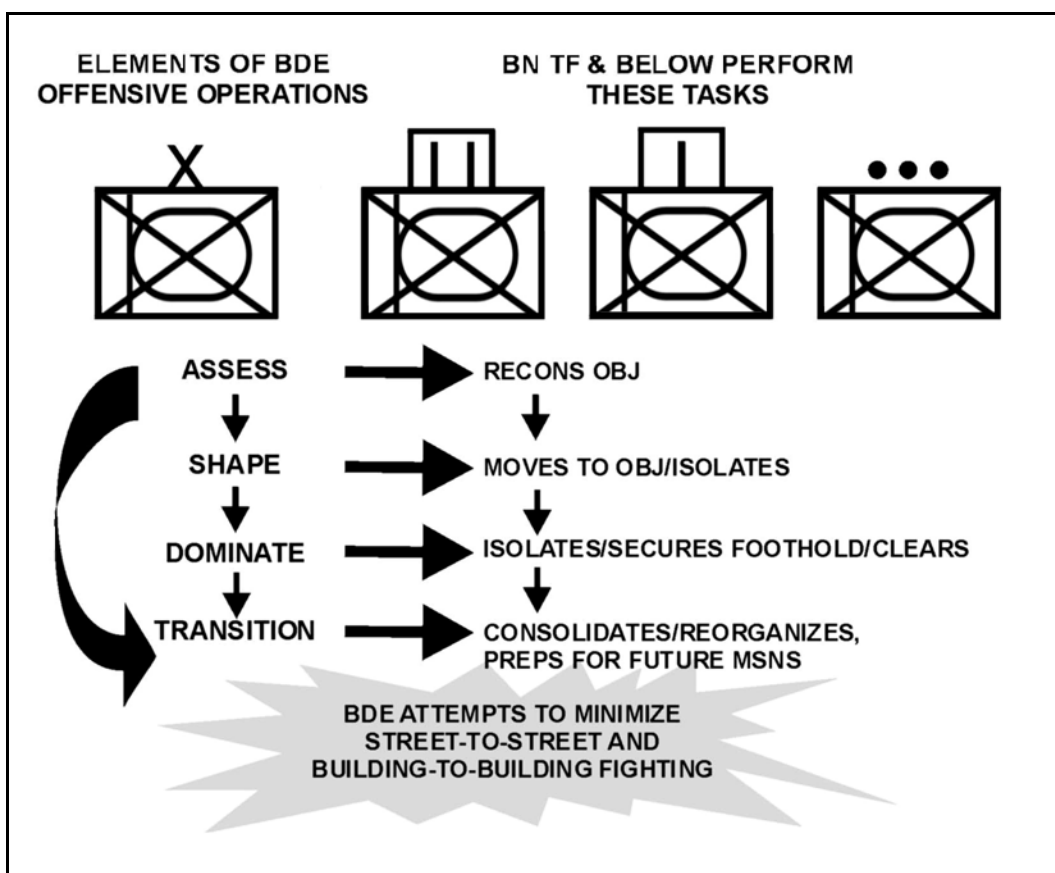


Figure 7-8. Offensive urban operational framework.

7-21. TYPES OF ATTACK DURING URBAN OFFENSIVE OPERATIONS

Offensive operations in an urban area are planned and implemented based on the factors of METT-TC. At the TF level, the offense takes the form of an attack.

a. **Attack under Hasty Conditions.** TFs conduct an attack after a successful defense or as part of a defense; as a result of a movement to contact, a meeting engagement, or a chance contact during a movement; or in a situation where the unit has the opportunity to attack vulnerable enemy forces. The attack in an urban area differs because the close, complex nature of the terrain makes command, control, and communications, as well as massing fires to suppress the enemy, more difficult. In urban areas, incomplete information, intelligence, and concealment may require the maneuver unit to move through, rather than around, the friendly unit fixing the enemy in place. Control and coordination become important to reduce congestion at the edges of the urban area.

b. **Attack under Deliberate conditions.** An attack during deliberate operation is a fully synchronized operation that employs all available assets against the enemy's defense (IAW with the ROE). It is characterized by detailed planning based on available information, thorough reconnaissance, preparation, and rehearsals. Given the nature of urban terrain, the attack of an urban area is similar to the techniques employed in assaulting a strongpoint. At the TF level, attack of an urban area usually involves the sequential execution of the following tactical tasks.

(1) **Reconnoiter the Objective.** This involves making a physical reconnaissance of the objective with TF assets and those of higher headquarters as the tactical situation permits. It also involves making a map reconnaissance of the objective and all the terrain that will affect the mission and an analysis of aerial imagery, photographs, or any other detailed information about the building(s) and other appropriate urban terrain. Additionally, any human intelligence collected by reconnaissance and surveillance units, such as the TF reconnaissance platoon, snipers, and so forth, should be considered during the planning process.

(2) **Move to the Objective.** This may involve moving through open terrain, urban terrain, or both. Movement should be made along covered and concealed routes and as rapidly as possible without sacrificing security. It can involve moving through buildings, down streets, in subsurface areas, or a combination of all three.

(3) **Isolate the Objective.** Isolation begins with the efforts of special operations force (SOF) units controlled by higher headquarters to influence enemy and civilian actions.

(a) The TF commander should consider using PSYOP teams, if available, to broadcast appropriate messages to the enemy and to deliver leaflets directing the civilian population to move to a designated safe area.

(b) In certain situations requiring precise fire, snipers can provide an excellent method of isolating key areas while simultaneously minimizing collateral damage and noncombatant casualties.

(c) Isolating the objective also involves seizing terrain that dominates the area so that the enemy cannot supply, reinforce, or withdraw its defenders. It also includes selecting terrain that provides the ability to place suppressive fire on the objective. TFs may be required to isolate an objective as part of the overall brigade operation or to do so independently (Figure 7-9). Depending on the tactical situation, company teams within the TF may have to isolate an objective by infiltration.

(d) Cordon and attack is a tactical task given to a unit to prevent enemy withdrawal from or reinforcement of a position. A cordon is a type of isolation. It implies seizing or controlling key terrain or mounted and dismounted avenues of approach. Figure 7-9, depicts an infantry-heavy brigade attacking to seize and clear OBJ EAGLE using the cordon and attack technique. The armor TF cordons OBJ EAGLE by occupying battle positions; the infantry TF seizes OBJ Eagle. Skillful application of fires and other combat multipliers may also defeat the enemy and preclude close combat. In the example shown in Figure 7-9, the battle positions are oriented to place fires on the enemy leaving OBJ EAGLE and to prevent his withdrawal from the objective area. The factors of METT-TC determine the mission end state and how the battle positions are oriented. Additional direct fire control measures, such as target reference points, engagement areas, and indirect fire control measures, can focus fires and assist in canalizing the enemy into desired areas.

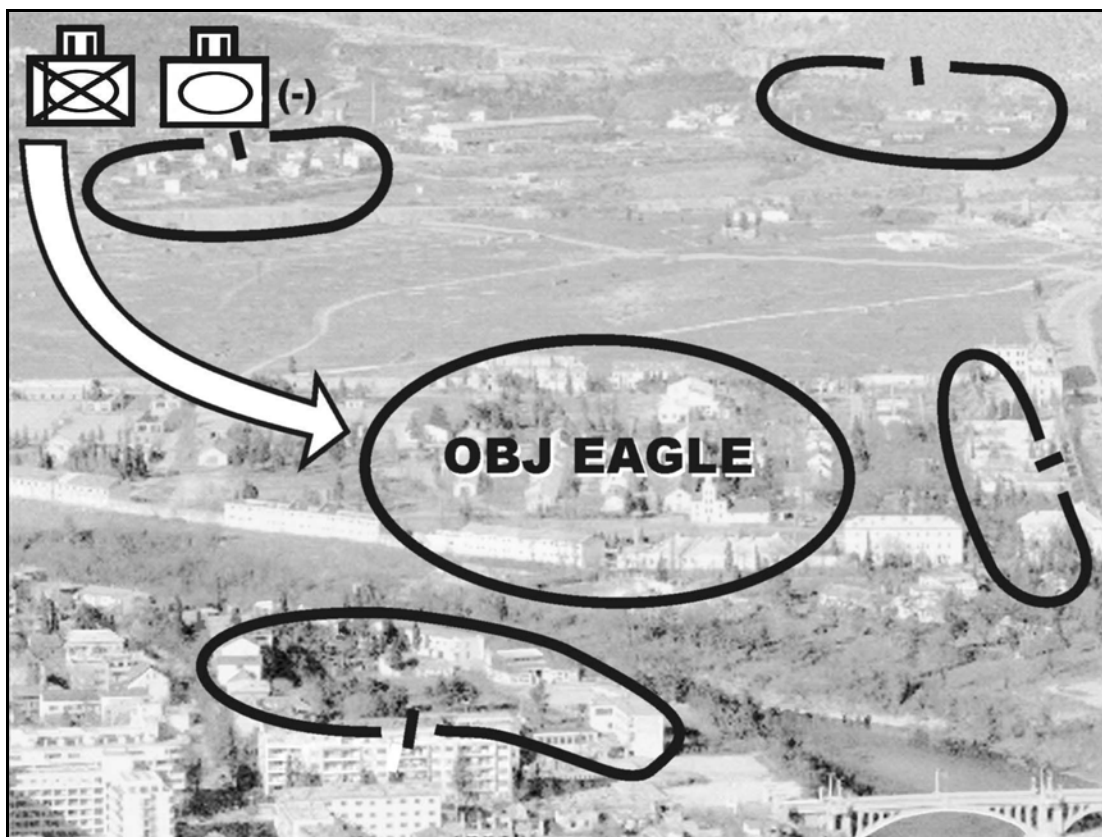


Figure 7-9. Isolation of an urban area using the cordon technique.

(4) ***Secure a Foothold.*** Securing a foothold involves seizing an intermediate objective that provides cover from enemy fire and a location for attacking troops to enter the urban area. The size of the foothold depends on the factors of METT-TC. For example, as one of the task force company teams attack to gain a foothold, it should be supported by suppressive fire and obscurants. In the example shown in Figure 7-10, page 7-26, the center TF conducts a supporting attack to seize OBJ DOG and the TF commander has determined that two intermediate objectives are necessary in order to seize OBJ DOG.

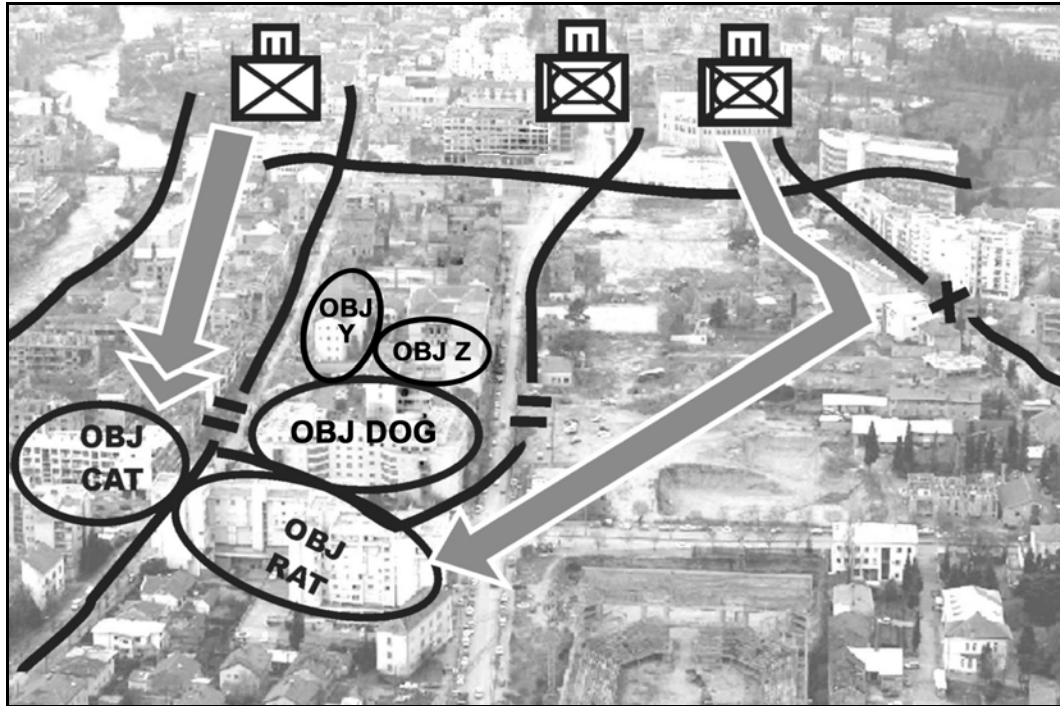


Figure 7-10. Securing a foothold, task force attack.

(5) ***Clear the Objective.*** The commander may decide to clear only those parts of the area necessary for the success of his mission if--

- An objective must be seized quickly.
- Enemy resistance is light or fragmented.
- The buildings in the area have large open areas between them. (In this case, the commander clears only those buildings along the approach to his objective or only those buildings necessary for security.)

The TF may have a mission to systematically clear an area of all enemy. Through detailed analysis, the TF commander may anticipate that he will be opposed by a strong, organized resistance or will be in areas having strongly constructed buildings close together. He may assign his company teams areas within the TF AO in order to conduct systematic clearing (Figure 7-11).

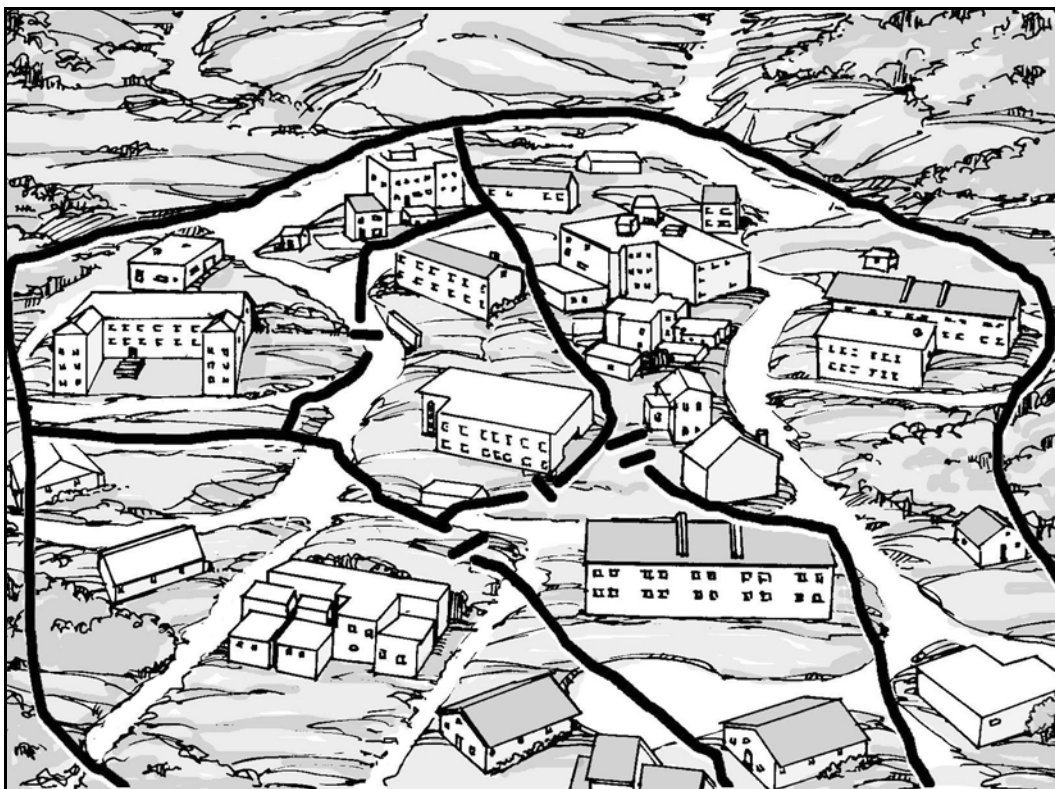


Figure 7-11. Example of how to develop a systematic clearance within assigned areas.

(6) *Consolidate or Reorganize and Prepare for Future Missions.* Consolidation occurs immediately after each action. Reorganization and preparation for future missions occurs after consolidation. Many of these actions occur simultaneously.

(a) Consolidation provides security, facilitates reorganization, and allows the TF to prepare for counterattack. Rapid consolidation after an engagement is extremely important in an urban environment.

(b) Reorganization actions (many occurring simultaneously) prepare the unit to continue the mission. The TF prepares to continue the attack or prepares for future missions, including the possible transition to stability and support operations.

7-22. TRANSITION

During transition, the TF continues to use all CS and CSS assets, consistent with the mission end state and ROE, to move from offensive operations to stability or support operations. The ultimate goal is to return the urban area to civilian control. During this step, the roles and uses of SOF, CS, and CSS units (civil affairs, PSYOP, medical, and military police) become more important with the requirements to maintain order and stabilize the urban area. These assets normally support the TF's transition efforts under brigade control. The TF staff, in coordination with the brigade staff, must prepare to transition from being a "supported" force to being the "supporting" force.

7-23. MOVEMENT TO CONTACT

Figure 7-12 depicts a movement to contact in an urban area using the search and attack technique. The TF uses this technique when its knowledge of the enemy is unclear and it must make contact. The TF normally employs this technique against a weak enemy force that is disorganized and incapable of massing strength, such as urban insurgents or gangs. The TF divides its portion of the AO into smaller areas and coordinates the movement of company teams. It can either assign sectors to specific company teams or control their movement by sequential or alternate bounds within the TF sector. During a mission of this type, the urban environment makes finding, fixing, and finishing the enemy difficult. For example, movement of units may become canalized due to streets and urban “canyons” created by tall buildings. The application of firepower may become highly restricted based on the ROE. The use of HUMINT in this type of action becomes increasingly more important and can be of great assistance during the “find” portion of the mission. This mission requires close coordination between infantry and armored vehicles as they move through and search the urban area.

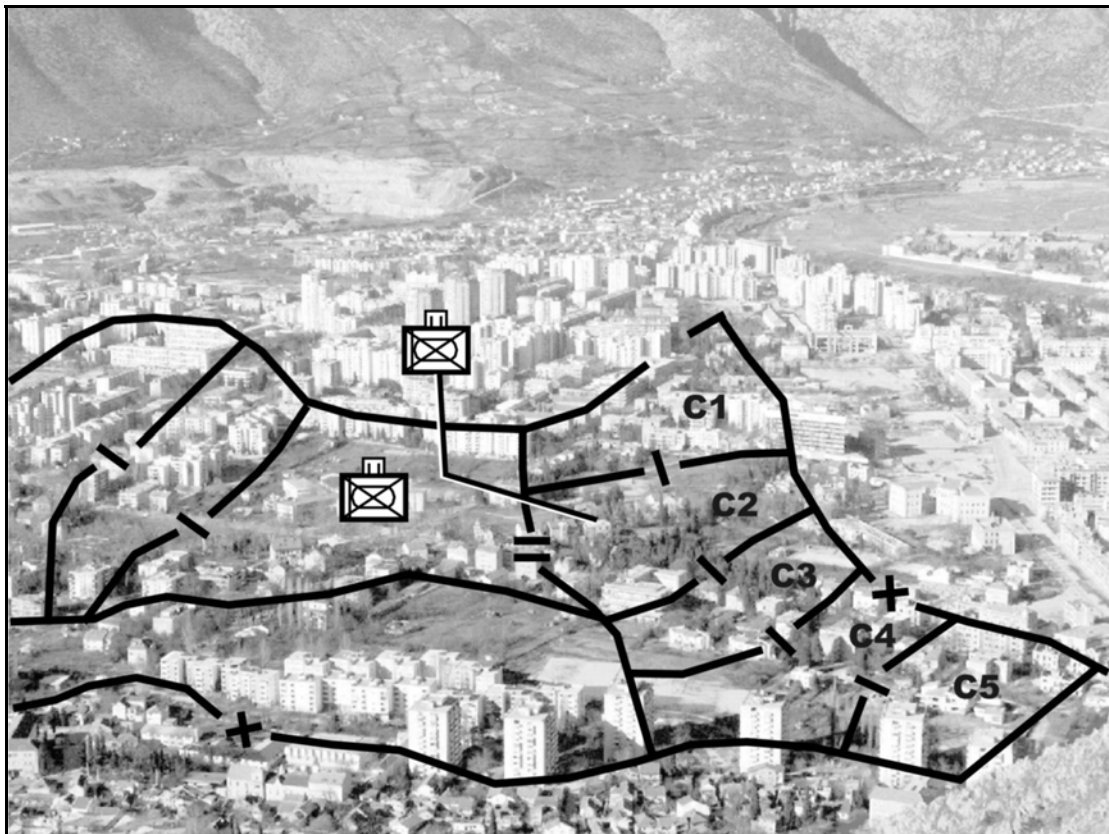


Figure 7-12. Graphical control measures to facilitate search and attack technique.

7-24. ATTACK OF A VILLAGE

The TF may have to conduct an attack of a village that is partially or completely surrounded by open terrain. (Figure 7-13 depicts a TF conducting such an attack.) After considering the factors of METT-TC, the TF performs the tactical tasks (specifically, reconnoiter the objective, move to the objective, isolate the objective, secure a foothold, clear the objective, and consolidate, reorganize, and prepare for future missions).

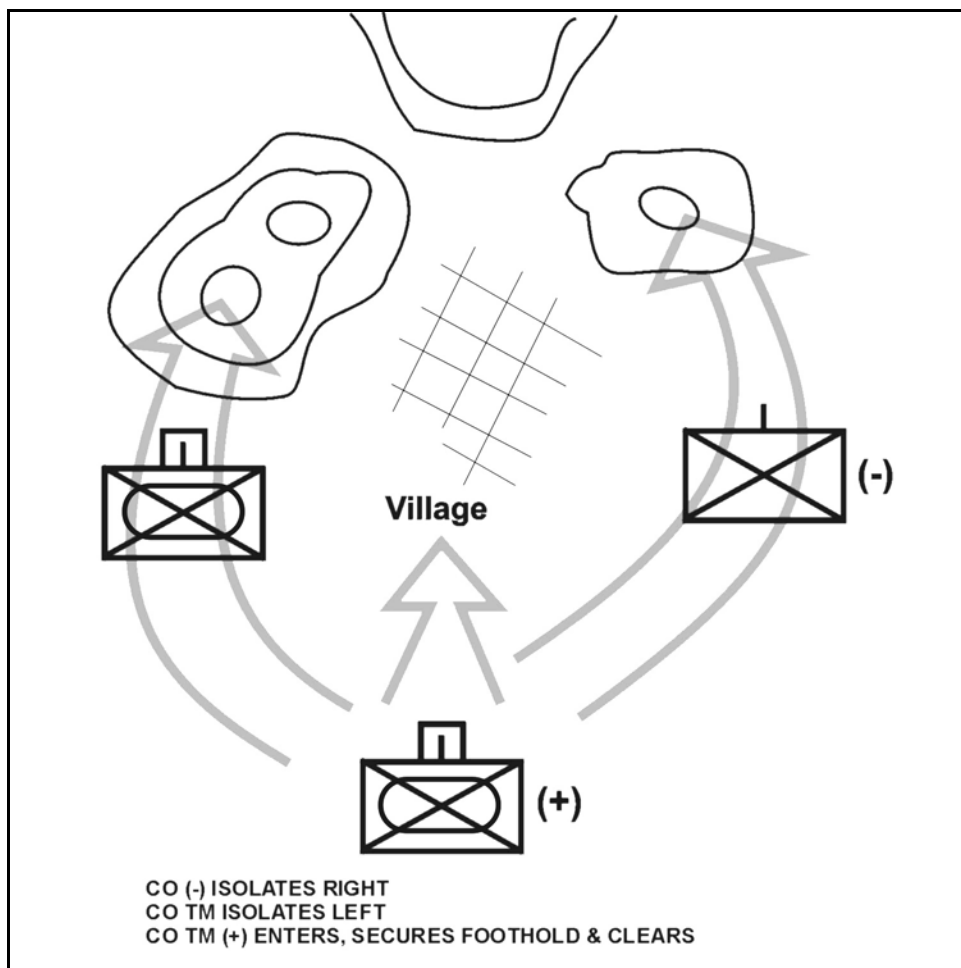


Figure 7-13. Attack of a village.

7-25. NODAL ATTACK

The TF may receive the mission to seize a key node (or nodes) as part of a brigade operation. In certain situations, the TF may have to seize nodes independently. Nodal attacks are characterized by rapid attacks followed by defensive operations. The enemy situation must permit the attacking force to divide its forces and seize key nodes. Multiple attacks (as depicted in Figure 7-14, page 7-30, and Figure 7-15, page 7-31) require precise maneuver and supporting fires. The TF may receive a nodal attack mission before an anticipated stability or support operation or when isolation of an urban area is required so other units can conduct offensive operations inside the urban area. Figure 7-14, page 7-30, depicts a brigade conducting multiple nodal attacks. Figure 7-15, page 7-31, depicts a TF executing a nodal attack. Nodal attacks are used to deny the

enemy key infrastructure. They may require a designated rapid response element (or elements) in reserve in the event that enemy forces mass and quickly overwhelm an attacking TF. Normally, the reserve is planned at brigade level, but TFs executing a nodal attack independently must plan for a designated rapid response reserve element. The duration of this attack should not exceed the TF's self-sustainment capability.

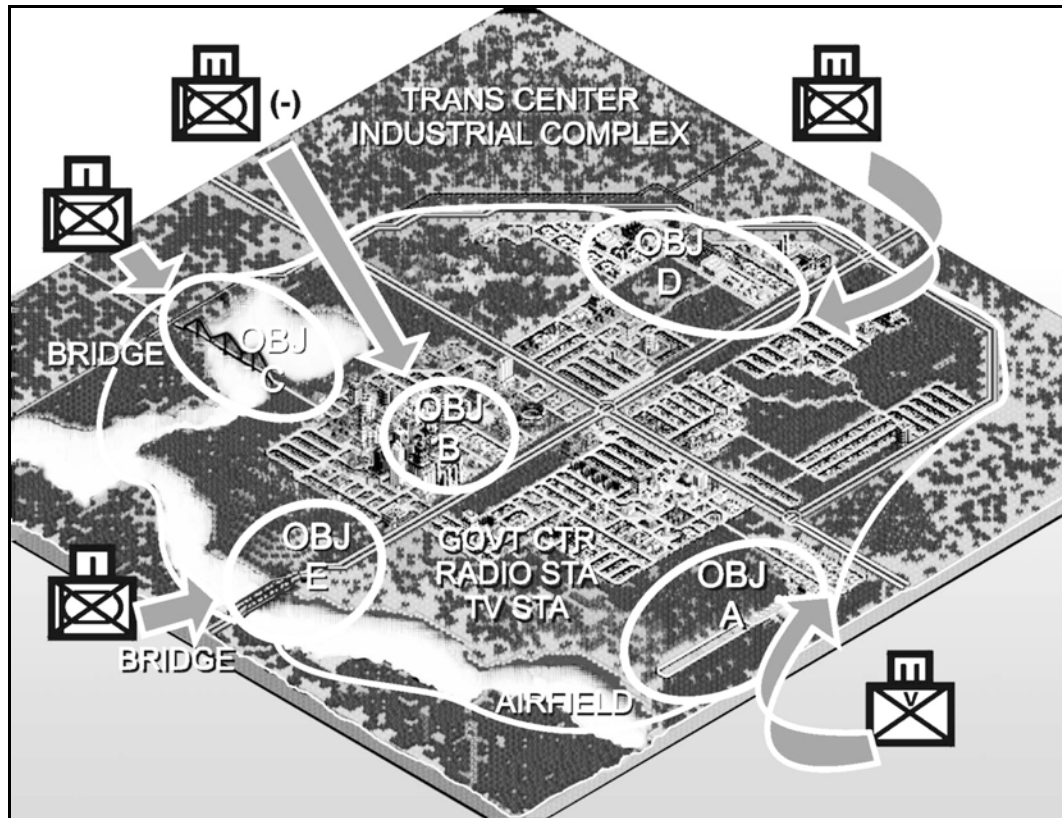


Figure 7-14. Brigade scheme of maneuver, nodal attack.

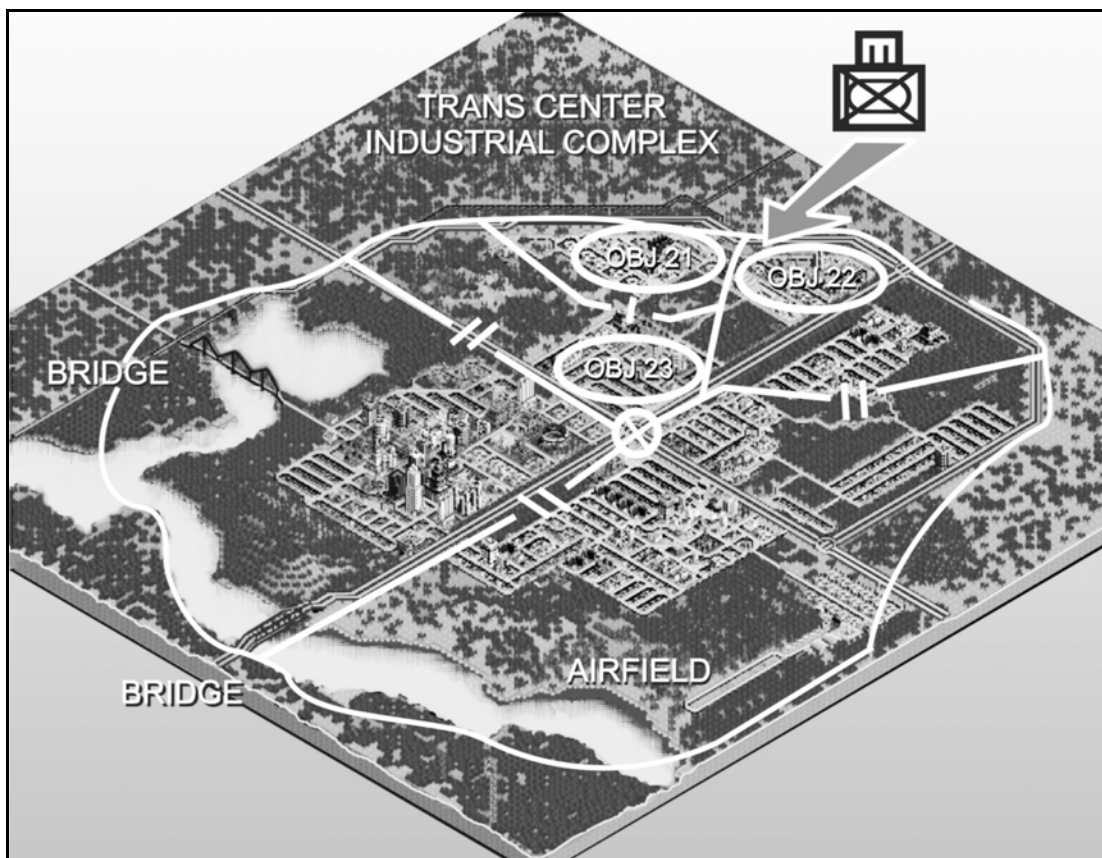


Figure 7-15. Task force nodal attack.

Section V. DEFENSIVE OPERATIONS

An area defense concentrates on denying an enemy force access to designated terrain for a specific time and is the type most often used for defending an urban area. The mobile defense concentrates on the destruction or defeat of the enemy through a decisive counterattack. A division or corps most frequently conducts a mobile defense, but the brigade is also capable of conducting a mobile defense. Mechanized and armor forces participate in mobile defenses as an element in the fixing force conducting a delay or area defense or as an element of the striking force conducting offensive operations. In an urban area, the defender must take advantage of the abundant cover and concealment. He must also consider restrictions to the attacker's ability to maneuver and observe. By using the terrain and fighting from well-prepared and mutually supporting positions, a defending force can inflict heavy losses upon, delay, block, or fix a much larger attacking force.

7-26. DEFENSIVE FRAMEWORK

Normally, the TF conducts defensive operations as part of a brigade. The brigade can conduct the full range of defensive operations within a single urban area or in an AO that contains several small towns and cities using the elements of the urban operational framework shown in Figure 7-16, page 7-32. The brigade avoids being isolated through security operations. It assigns defensive missions to subordinate TFs in order to achieve the commander's intent and desired end state. Well-planned and executed defensive

operations have four elements: assess, shape, dominate, and transition. During defensive operations, the brigade commander seeks to--

- Avoid being isolated by the enemy.
- Defend key and decisive terrain, institutions, or infrastructure.
- Use offensive fire and maneuver to retain the initiative.

TFs conduct defensive operations by conducting counterreconnaissance missions and patrols (avoiding isolation); assigning battle positions or sectors to company teams (defending); and consolidating or reorganizing and preparing for follow-on missions (transitioning).

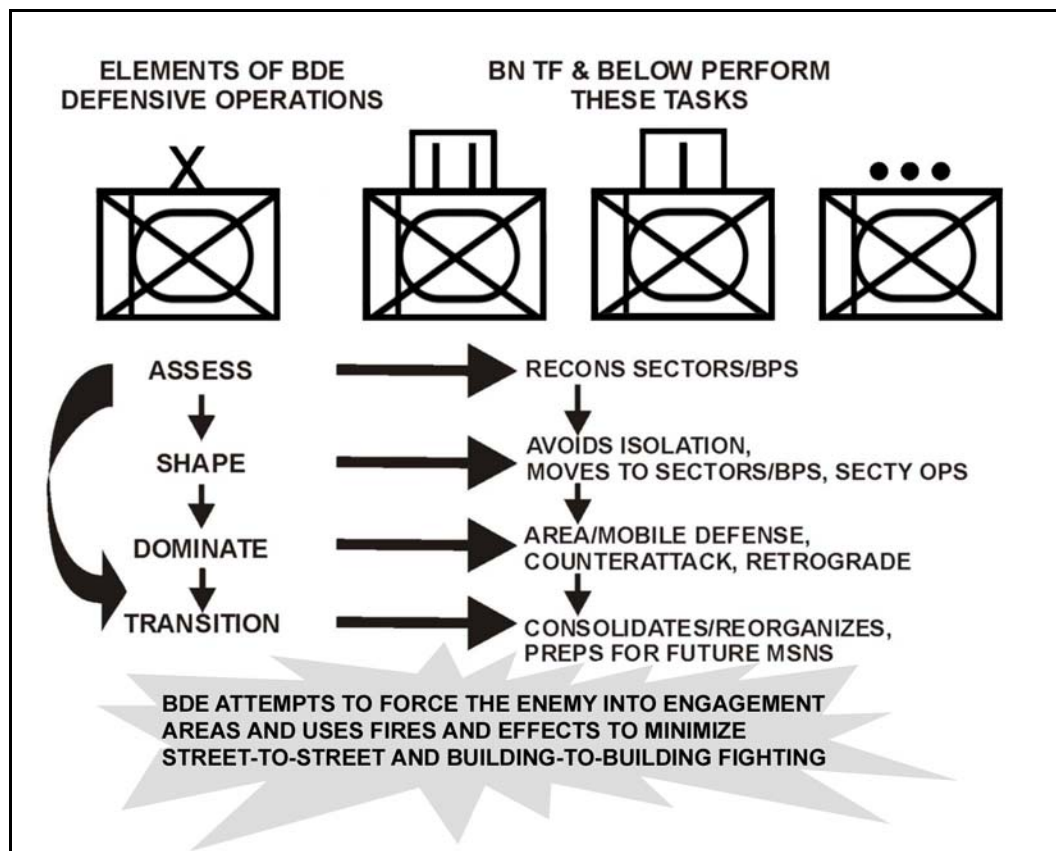


Figure 7-16. Defensive urban operational framework.

7-27. DEFENSIVE PLANNING

TFs defending in urban areas must prepare their positions for all-round defense. Subordinate units must employ aggressive security operations that include surveillance of surface and subsurface approaches. TFs must constantly patrol and use OPs and sensors to maintain effective security. They must take special measures to control enemy combatants who have intermixed with the local population and civilian personnel who may support the enemy.

a. Defensive fire support in urban operations must take advantage of the impact of indirect fires on the enemy before he enters the protection of the urban area. Fire support officers at all levels must coordinate and rehearse contingencies that are inherent to nonlinear fire support coordination measures and clearance of fires. The fire support

officer also plans and coordinates nonlethal capabilities for the TF. Civil affairs and PSYOP assets should be coordinated with the appropriate command and control warfare or information operations headquarters.

b. In planning a defense in an urban area, the TF staff must identify the following:

- Positions and areas that must be controlled to prevent enemy infiltration.
- Sufficient covered and concealed routes for movement and repositioning of forces.
- Structures and areas that dominate the urban area.
- Areas, such as parks and broad streets, that provide fields of fire for tanks and antiarmor weapons.
- Areas to position artillery assets.
- C2 locations.
- Protected areas for CSS activities.
- Suitable structures that are defensible and provide protection for defenders.
- Contingency plans in the event that the TF must conduct breakout operations.
- Plans for rapid reinforcement.

7-28. INTEGRATING THE URBAN AREA INTO THE DEFENSE

The TF may integrate villages and small towns into the overall defense, based on higher headquarters' constraints and applicable ROE (Figure 7-17). A defense in an urban area, or one that incorporates urban areas, normally follows the same sequence of actions and is governed by the principles contained in Chapter 6. When defending on predominately urban areas, the TF commander must consider that the terrain is more restrictive due to buildings that are normally close together. This usually requires a higher density of troops and smaller company team sectors or battle positions than in open terrain.

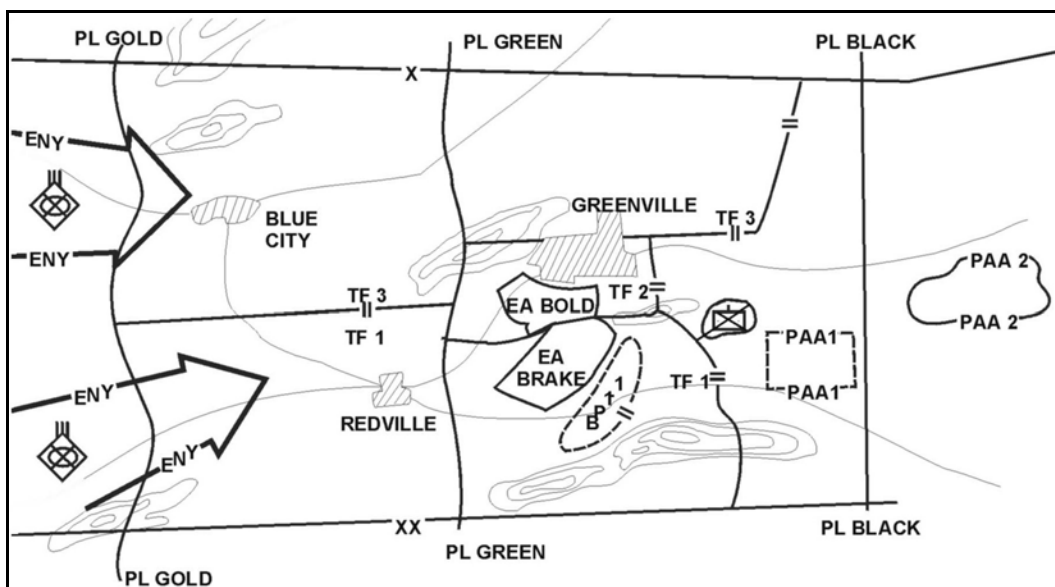


Figure 7-17. Integrating urban areas into a defense.

7-29. NODAL DEFENSE

Figure 7-18 depicts a transitional situation where the TF moves from an offensive to a defensive operation. The brigade mission may contain factors that require varying defensive techniques by the subordinate TFs under the brigade's control. Figure 7-19 depicts a nodal defense where TFs employ different defensive techniques in order to achieve the brigade commander's desired end state. The brigade commander's intent is to safeguard the key nodes seized during the offensive operation in order to return the infrastructure of this particular urban area back to civilian control eventually. Each battalion employs a different defensive technique: strongpoint, perimeter, and battle position.

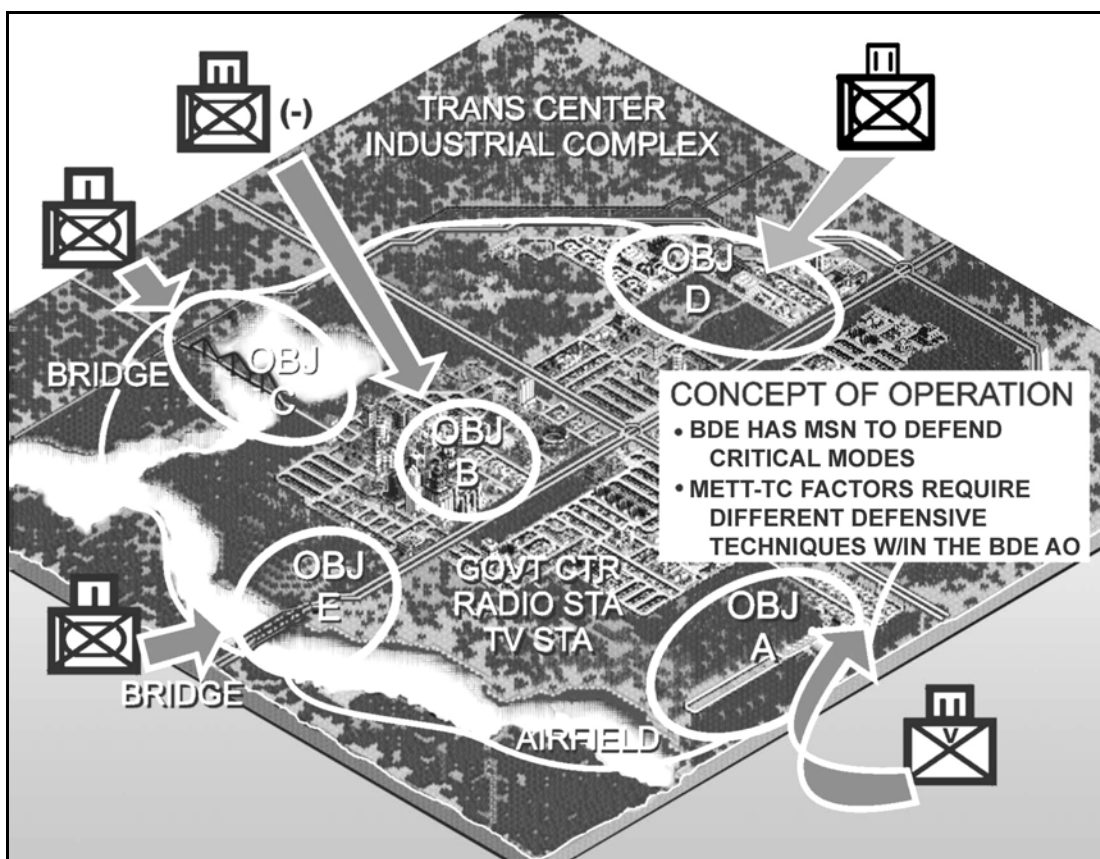


Figure 7-18. Nodal defense, transitional situation.

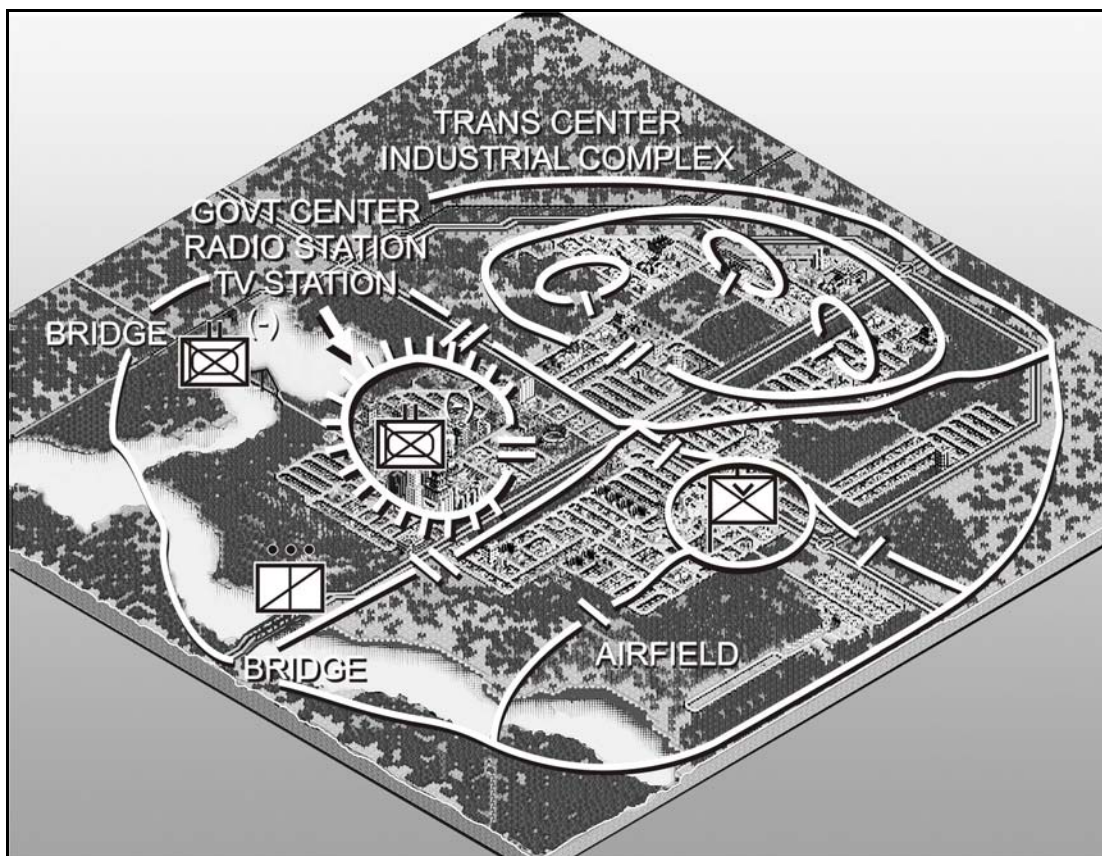


Figure 7-19. Nodal defense, different defensive techniques.

a. **Task Organization.** Company teams may have to be task-organized to conduct the specific missions assigned by the TF commander in a nodal defense.

b. **Symmetrical and Asymmetrical Threats.** The TF is likely to respond to both symmetrical and asymmetrical threats within the area of operations. The defensive techniques chosen by subordinate company teams should allow them to respond to the specific threats in their respective AOs, battle positions, or sectors.

c. **Boundary Changes.** Again, based on the TF commander's intent and the defensive scheme of maneuver, boundary changes may be required in order to give company teams more or less maneuver space.

d. **ROE Modification.** The ROE may require modification based on the type of mission to be conducted. The ROE may become more or less restrictive based on METT-TC factors. Commanders and leaders must ensure that the ROE are clearly stated and widely disseminated at the beginning and conclusion of each day.

NOTE: The digital force has the potential to provide accurate enemy information that can enhance and facilitate targeting and obstacle placement. JSTARS, Guardrail, unmanned aerial vehicles (if present), and other reconnaissance assets can significantly improve the enemy targeting capability of the unit.

7-30. DELAY

The purpose of a delay is to slow the enemy, cause enemy casualties, and stop the enemy (where possible) without becoming decisively engaged or bypassed. The delay can be oriented either on the enemy or on specified terrain such as a key building or manufacturing complex.

a. **Ambushes and Battle Positions.** The TF conducts a delay in an urban area from a succession of ambushes and battle positions (Figure 7-20). The width of the TF AO depends on the amount of force available to control the area, the nature of the buildings and obstacles along the street, and the length of time that the enemy must be delayed.

(1) **Ambushes.** The TF plans ambushes on overwatching obstacles. Ambushes are closely coordinated but executed at the lowest levels. The deployment of the TF is realigned at important cross-streets. The TF can combine ambushes with limited objective attacks on the enemy's flanks, employing tanks and BFVs along with dismounted infantry. These are usually effective in the edge of open spaces (parks, wide streets, and so on).

(2) **Battle Positions.** The TF should place battle positions where heavy weapons, such as tanks, BFVs, antiarmor weapons, and machine guns, have the best fields of fire. Such locations are normally found at major street intersections, in parks, and at the edge of open residential areas. The TF should prepare battle positions carefully and deliberately, reinforce them with obstacles and demolished buildings, and support them using artillery and mortars. The TF should position BPs to inflict maximum casualties on the enemy and cause him to deploy for an attack.

b. **Two Delaying Echelons.** The TF is most effective when deployed in two delaying echelons which alternate between conducting ambushes and fighting from battle positions. As the enemy threatens to overrun a battle position, the company team disengages and delays back toward the next battle position. As the company team passes through the company team to the rear, it establishes another battle position. The TF uses smoke and demolitions to aid in the disengagement. Security elements on the flank can help prevent the enemy from out-flanking the delaying force. A small reserve can react to unexpected enemy action and conduct continued attacks on the enemy's flank.

c. **Engineers.** The engineer effort should be centralized at first to support the preparation of battle positions, then decentralized to support the force committed to ambush.

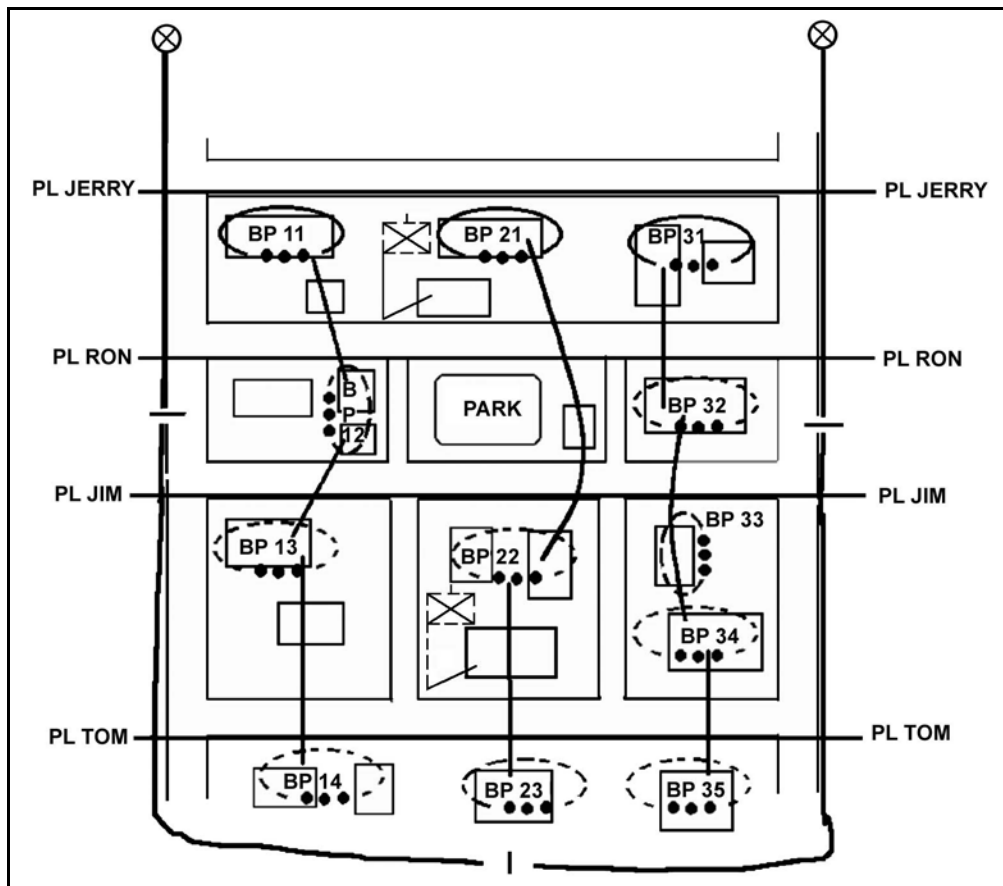


Figure 7-20. Task force delay in an urban area.